



URS OPERATING SERVICES

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September 30, 2002

Mr. Hays Griswold On-Scene Coordinator U.S. Environmental Protection Agency, Region VIII 999 18th Street, Suite 500, Mail Code: 8EPR-ER Denver, Colorado 80202-2405

SUBJECT: START2, EPA Region VIII, Contract No. 68-W-00-118, TDD No. 0202-0002

Trip Report, Naples Truck Stop, Vernal, Uintah County, Utah

Dear Mr. Griswold:

Attached are two copies of the draft Trip Report for the Naples Truck Stop in Vernal, Uintah County, Utah. Sampling activities were conducted at the site on June 17, 2002. This document is submitted for your review and comments.

If you have any questions, please call me at 303-291-8380.

Very truly yours,

URS OPERATING SERVICES, INC.

Becci Treitz

Environmental Scientist

cc:

T. F. Staible/UOS

(w/o attachment)

File/UOS

EPA ACTION BLOCK
Approved Approved, TDD to follow Approved as corrected Disapproved Review with Original to Copy to Reply envelope enclosed
Date By

URS Operating Services, Inc. START2, EPA Region VIII Contract No. 68-W-00-118

Naples Truck Stop - Trip Report Revision: 0 Date: 09/2002 Page 1 of 6

TRIP REPORT NAPLES TRUCK STOP Vernal, Uintah County, Utah

1.0 INTRODUCTION

This Trip Report for the Naples Truck Stop site is submitted in accordance with the task elements specified in Technical Direction Document (TDD) number 0202-0002 issued to URS Operating Services, Inc. (UOS) Superfund Technical Assessment and Response Team 2 (START2) contract #68-W-00-118 in Region VIII by the U.S. Environmental Protection Agency (EPA). Naples Truck Stop is located on the north side of State Highway 40 at 1581 South 1625 East in Naples, Uintah County, Utah (Figure 1). The START2 personnel Randy Perlis and Becci Treitz conducted the sampling event on June 17, 2002, based on the field sampling plan for Naples Truck Stop. Field activities followed the applicable UOS Technical Standard Operating Procedures (TSOPs) and the Generic Quality Assurance Project Plan (URS Operating Services, Inc. (UOS) 2000; UOS 2001).

2.0 SITE HISTORY

Naples Truck Stop was a bulk petroleum distributor that is now vacant. In 1993 a tank and line monitoring alarm at Questar Pipeline Company, a trucking company adjacent to Naples Truck Stop, made Questar aware of a leak at the neighboring Naples Truck Stop of more than 7,000 gallons of unleaded gasoline from an underground tank. The EPA Region VIII's Technical Assistance Team (TAT) installed groundwater monitoring wells at both Naples Truck Stop and on the Questar property. The Army Corps of Engineers installed an active groundwater treatment system (vacuum-enhanced pumping/biotreatment, thermal oxidizer unit, granular activated carbon filtration unit) in March 1994 that operated until 1998. In 1998 the EPA Response, Engineering, and Analytical Contract (REAC) had a passive phytoremediation system installed. The phytoremediation system consists of 300 Sioux-land poplar trees with a drip irrigation system installed and maintained by Landscapes and Vinyl Construction. Although hydrocarbons were detected in the wells from the November 2001 Jacobs Engineering sampling event, petroleum products show a decreasing trend over time in the downgradient wells.

Page 2 of 6

3.0 <u>SAMPLING ACTIVITIES</u>

START2 personnel arrived on site at 1345 hours on June 17, 2002, to sample five wells at the Naples Truck Stop. Access and keys to the gated area were obtained from Neil at the Questar office. Sampling was performed in level D personal protective equipment. Groundwater monitoring wells VMP-02, MW-01, MW-08, MW-10, and MW-14 were sampled based on the sampling that was conducted by Jacobs Engineering in the past. The wells were either two inches or four inches in diameter. All samples were delivered by START2 and submitted for Total Petroleum Hydrocarbons for gasoline (TPH-gasoline) 8015/Total Volatile Hydrocarbons 6-10 (TVH C6-C10) and Volatile Organic Compounds (VOCs) 8260 to the ACZ Laboratory in Steamboat Springs, Colorado. Water level and total depth of the well was measured with a Solinst groundwater level meter. Parameters including pH, conductivity, total dissolved solids (TDS), and temperature were taken using a Hanna HI991301 meter. Parameters for the wells are listed in Table 1.

All of the wells were purged at least three well volumes or purged dry before the sample was taken (Appendix A). Wells were purged by hand bailing using bailers that were designated for the wells, except for well MW-01, and START2 provided a bailer for that well. Every well now has a designated bailer. Purge water was poured on the ground near the wells to evaporate. Well VMP-02 was sampled first, based on its location and accessability. Depth to water, total depth, and amount of water purged for each well is in Appendix A. The START2 personnel then moved to the gated area to find wells MW-01 and MW-14. Well MW-01 was located according to the map (Figure 2) as MW-01, but the cement around the well was labeled MW-02. No other well MW-01 was located. A sample was not taken from well MW-01 because the well water column was approximately two inches and there was not enough water to purge from the well to take a sample. Well MW-14 was not located. Well MW-15 was sampled in place of MW-14, but the sample was still labeled NTS-MW-14. Wells MW-08 and MW-10 were located and sampled. The locations of the wells sampled are shown on Figure 3.

4.0 ANALYTICAL RESULTS

Analytical results are listed in Table 2 and the laboratory analytical data and Data Validation report are in Appendix B. All samples were analyzed for TVH C6 to C10 by method 8015, and VOCs by method 8260. Sample NTS-MW-10 had the highest detections of benzene, toluene, naphthalene, ethylbenzene, m,p-xylene, and other VOCs. Sample NTS-VMP-02 was the only other sample in which benzene was detected at 70 parts

URS Operating Services, Inc. START2, EPA Region VIII Contract No. 68-W-00-118

Naples Truck Stop - Trip Report Revision: 0

Date: 09/2002

Page 3 of 6

per billion (ppb). Sample NTS-VMP-02 also had the highest detection of methyl tertiary butyl ether (MTBE)

at 360 ppb and sample NTS-MW-08 had an MTBE detection at 61 ppb. Sample NTS-MW-14, sample

NTS-MW-20, the duplicate of sample NTS-MW-14, and the trip blank NTS-MW-21 did not have detections

of VOCs, but all had results of TVH C6 to C10 between 0.023 ppm in sample NTS-MW-21 and 3.5 in

sample NTS-MW-10. Sample NTS-MW-10 also had the highest detection of TVH C6 to C10 at 3.5 ppm,

and sample NTS-VMP-02 had a detection of TVH at 0.659 ppm. Samples NTS-MW-14 and NTS-MW-20

had detections of TVH C6 to C10 at 0.026 ppm, and sample NTS-MW-08 had a detection of 0.22 ppm.

Each of the results of the TVH C6 to C10 had a J qualifier indicating an estimated value or a UJ qualifier

indicating estimated because quality control criteria were not met (Table 2).

5.0 <u>DATA VALIDATION</u>

The analytical results reported in Section 4.0 and Table 2 were submitted for data validation performed by

START2 subcontractor TechLaw, Inc. (Appendix B).

According to the TechLaw data validation report, minor anomalies were identified in the data package. The

sample taken for the MS/MSD at well MW-10 was not applicable, because the benzene detection limit was

more then four times the spiking level. Values had a J estimated value for TPH-gasoline. The data validation

report is attached in Appendix B. The data presented are of acceptable quality for the intended use.

TDD No. 0202-0002 P:\Start2\Naples Truck Stop2\text061702.wpd:bas

6.0 **SUMMARY**

On June 17, 2002, START2 performed groundwater sampling at the Naples Truck Stop in Naples, Uintah County, Utah. Four monitoring wells were sampled. The map location for well MW-01 was marked as MW-02 on the well, but was left as MW-01 in notes and sample identification. Well MW-01 was dry, and therefore was not sampled. Well MW-14 was not located so well MW-15 was sampled in place of well MW-14 and the sample was labeled as NTS-MW-14. Parameters for pH, conductivity, TDS, and temperature was taken at each well. The wells were purged at least three well volumes before being sampled by hand bailing and disposing of the purge water on the nearby ground. All of the Sioux-land poplar trees were green and in good condition.

MTBE was detected in wells MW-08 and VMP-02 at 61 ppb and 360 ppb respectively. While there were detections of MTBE in the two wells, the results were lower than results from previous spring sampling events. Samples from well MW-08 had detections of 210 ppb and 120 ppb in April 2000 and June 2001 respectively. Samples from well VMP-02 also had lower detections of MTBE than 720 ppb in April 2000 and 750 ppb in June 2001. TVH C6-C10 was detected in all of the wells sampled, but most of the results were lower then the results from the sampling event in November 2001. Samples from well MW-10 had the highest detection of TVH C6-C10 at 3.5 ppm, which was lower than 10,000 ppm in November 2001. The detection of TVH C6-C10 in sample NTS-MW-08 was also lower at 0.22 ppm than 320 ppm in November 2001, and the detection of TVH C6-C10 in sample NTS-VMP-02 was lower at 0.023 ppm than the 820 ppm in November 2001. Samples from well MW-14 had a slightly higher detection of TVH C6-C10 in November 2001 with a result of 10 ppm (estimated) in November 2001 compared to the 26.5 ppm result in June 2002, and duplicate sample NTS-MW-20 had a result of 0.026 ppm. All of the results for TVH C6-C10 are qualified J estimated or UJ estimated. Overall, detections of MTBE, TVH C6-C10, and VOCs were lower than in past sampling events.

Naples Truck Stop - Trip Report Revision: 0 Date: 09/2002 Page 5 of 6

TABLE 1 **Parameters for Wells**

Well ID	рН	Conductivity (μS)	TDS (ppt)	Temperature (°F)
NTS-VMP-02	6.38	2.23	1.12	78.9
NTS-MW-01 (MW-02)	NA	NA	NA	NA
NTS-MW-14 (MW-15)	6.82	3.32	1.66	59.1
NTS-MW-08	7.9	2.58	1.30	66.0
NTS-MW-10	7.32	1.59	0.85	68.3

μS TDS

Micro Siemens.

Total dissolved solids.

Parts per thousand.

Naples Truck Stop - Trip Report Revision: 0 Date: 09/2002 Page 6 of 6

TABLE 2
Analytical Results for VOCs and TPH-gasoline

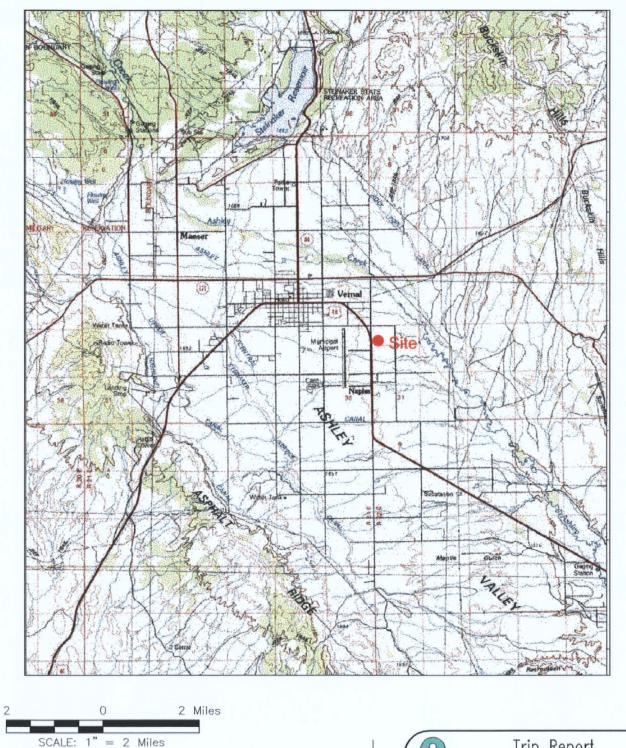
Chemical	NTS-MW-08	NTS-MW-10	NTS-VMP-02	NTS-MW-14	NTS-MW-20	NTS-MW-21
MTBE (ppb)	61	ND	360	ND	ND	ND
1,2,4- Trimethylbenzene (ppb)	ND	142	ND	ND	ND	ND
1,2 Dichloroethane (ppb)	ND	26	ND	ND	ND	ND
1,3,5 Trimethylbenzene (ppb)	ND	18	ND	ND	ND	ND
Benzene (ppb)	ND	1,490	70	ND	ND	ND
Ethylbenzene (ppb)	ND	500	ND	ND	ND	ND
Isopropylbenzene (ppb)	ND	6 J	ND	ND	ND	ND
m,p xylene (ppb)	ND	150	ND	ND	ND	ND
Naphthalene (ppb)	ND	9 J	ND	ND	ND	ND
o-xylene(ppb)	ND	7 J	ND	ND	ND	ND
n Propylbenzene (ppb)	ND	63	ND	ND	ND	ND
Toluene (ppb)	ND	19	ND	ND	ND	ND
TVH C6 to C10 (ppm)	0.220 J	3.5 J	0.659 J	0.026 UJ	0.026 UJ	0.023 UJ

ND Non Detect

Estimated value

UJ The reported quantitation limit is estimated because Quality Control criteria were not met.

TDD No. 0202-0002 P:\START2____







Trip Report

Naples Truck Stop Naples, Utah

Site Location Map

September 2002



URS Operating Services START2, EPA Region VIII Contract No. 68-W-00-118 Naples Truck Stop - TR Revision: 0 Date: 09/2002 → MW C-2 → MW C-1 Legend MW C-3 ◆ → MW-02 Monitoring Well Location Tanks O VMP-03 O VMP-02 Vapor Monitoring Location Pumps ▲ RW-02 Recovery Well NGMW-06 Pumps Truck Stop ▲ RW-10 Ramp o VMP-02 RW-09 A ____ HWY 40 Control MW-08 + Sheds RW-11 **Tools Building** Shed Treatment Building Questar ◆ NGMW-01 Storage RW-04 RW-12 MON. 1 MW-06⊕ 1620 East ▲ RW-02 **♦** MW-04 **♦** MW-15 RW-06▲ **♦ MW-02** ▲ RW-07 National Oil Well ▲ RW-03 Building Office o VMP-01 **♦** MW-01 Questar MW-03 Building **♦ MW-14** Warehouse ▲ RW-08 NGMW-04 VMP-07 Building ◆ NGMW-02 1700 South ◆ NGMW-07 Trip Report TDD No. 0202-0002 100 Feet Naples Truck Stop Naples, Utah SCALE: 1" = 100' Former Well Locations Figure 2 TDD No. 0202-0002 P:\START2_____ September 2002

APPENDIX A

Monitoring Well Sampling Data Sheets

Monitoring Well

Records Management Data

Project Number	OPERATING SERVICES, INC.	Sa	ampling	Data			···	
Well/Borehole Location Static Water Level Yt.		Project Name	les Tro	nck Stor	0			_
Sampling Method: Bar. Pres.: WATER ELEVATION DATA 1) Depth Water Surface: (from easing top as marked) 2) Static Water Level Elevation: (casing top elevation minus 1) 3) Depth to Well Bottom: (from casing top so marked) 4) Height of Water Column (h): (3) The sample of water in Well: (3) minus 1) Volume of water in Well: (6) (1) E. C. C. C. S. gals (1) Amount of Water Removed: (1) Amount of Water Removed: WELL PURGE DATA Method: Date: Time Temp % F Conductivity Date: Time Temp % F Conductivity Date: Time Temp % F Conductivity Depth Turbidity Removed Flow Rate WATER SAMPLE DATA Water Temp: % Specific Conductance: Physical Appearance: Remarks: Weather Towal Ilter jer etc.): Physical Appearance: Remarks:	Well/Borehole Number	Well/Borehole	Location		St	atic Water Level		
Sampling Method: Bar Pres: WATER ELEVATION DATA 1) Depth Water Surface: (from casing top as marked) 2) Static Water Level Elevation: (casing top elevation minus 1) 3) Depth to Well Bottom: (3) Depth to Water Column (h): (3) The dight of Water Column (h): (3) The dight of Water Column (h): (3) The dight of Water Column (h): (4) Height of Water Column (h): (5) The dight of Water Column (h): (6) The dight of Water Column (h): (7) The dight of Water Column (h): (8) The dight of Water Column (h): (9) The dight of Water Column (h): (1) The dight of Water Column (h): (2) The dight of Water Column (h): (3) The dight of Water Column (h): (4) Height of Water Column (h): (5) The dight of Water Column (h): (6) The dight of Water Column (h): (6) The dight of Water Column (h): (7) The dight of Water Column (h): (8) The dight of Water Column (h): (9) The dight of Water Column (h): (9) The dight of Water Column (h): (1) The dight of Water Column (h): (2) The dight of Water Column (h): (2) The dight of Water Column (h): (3) The dight of Water Column (h): (4) Th		<u> </u>					11.	=
Bar. Pres:: WATER ELEVATION DATA 1) Depth Water Surface: 8	Sample No.: VMP-02							
WATER ELEVATION DATA 1) Depth Water Surface: 8 4	Sampling Method:						····	
1) Depth Water Surface: 8 4	Bar. Pres.:			Amb. Temp. (I	P):_\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			
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(casing top elevation minus 1) 3) Depth to Well Bottom: 17.) (from casing top as marked) 4) Height of Water Column (h): 3, 7 (3 minus 1) Volume of water in Well: (x) (h) = 0.00 3 gals (for 2" x = 0.163 gal/ft fpr 4" x = 0.653 gal/ft) Amount of Water Removed: 10.00 100 11	(from casing top as marked)		•					
(casing top elevation minus 1) 3) Depth to Well Bottom: 17.) (from casing top as marked) 4) Height of Water Column (h): 3, 7 (3 minus 1) Volume of water in Well: (x) (h) = 0.00 3 gals (for 2" x = 0.163 gal/ft fpr 4" x = 0.653 gal/ft) Amount of Water Removed: 10.00 100 11	Static Water Level Elevation:							-
3) Depth to Well Bottom: 7. (from easing top as marked) 4) Height of Water Column (h): 3, 7					<u> </u>			
(from easing top as marked) 4) Height of Water Column (h): 3, 7 (3 minus 1) Volume of water in Well: (x) (h) =	2) Don't to Wall Pattom:	17.)		Product obs:	•	U Yes	U No	
## Water Sample Data Water Samp	(from casing top as marked)	· <u> </u>	·				•	
Volume of water in Well: (x) (h) =		37		Depth to Produ	ıct:			
Volume of water in Well: (x) (h) =	4) Height of Water Column (h):	<u>. J. I </u>		Method of Mea	asurement:			
(for 2" x = 0.163 gal/ft fpr 4" x = 0.653 gal/ft) Amount of Water Removed from Well: 7 o a) Method of Water Removal: \(\ldot \) \(\ldot		10 / - 2						
Amount of Water Removed from Well: 7 all Method of Water Removal: Land Lall Lall Was Well Pumped Dry? Yes No WELL PURGE DATA Method: Date:	Volume of water in Well: (x) (h)	= <u> </u>	25 gals					
WELL PURGE DATA Method: Date: Time Temp & F Conductivity pH Turbidity Removed Flow Rate Observations 1430 78.9 2.23 S 6.38 1.1 Zppt 79al WATER SAMPLE DATA Water Temp: Specific Conductance: pH: Containers Used (VOA Vial, 1 liter jar etc.): Physical Appearance: Remarks:	Amount of Water Removed from	Well: 7 a	al	•				
Method: Date: Time Temp % F Conductivity pH Turbidity Removed Flow Rate Observations 1430 78.9 2.23µS 6.38 1.12ppt 7gal WATER SAMPLE DATA Water Temp: Specific Conductance: micromhos pH: Containers Used (VOA Vial, 1 liter jar etc.): Physical Appearance: Remarks:	Method of Water Removal: h	and bai		Was Well Pum	ped Dry?	U Yes	U No	
Method: Date: Time Temp % F Conductivity pH Turbidity Removed Flow Rate Observations 1430 78.9 2.23µS 6.38 1.12ppt 7gal WATER SAMPLE DATA Water Temp: Specific Conductance: micromhos pH: Containers Used (VOA Vial, 1 liter jar etc.): Physical Appearance: Remarks:	WELL PURGE DATA							-
Time Temp & F Conductivity pH Turbidity Removed Flow Rate Observations 1430 78.9 2.23 \(\text{LS} \)	*					·		
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WATER SAMPLE DATA Water Temp:°C	Time Temp & F	Conductivity	pH				Observations	
Water Temp: °C	1430 78.9	2.23 uS	6.58	1.17pt	<u>tgal</u>			
Water Temp: °C				-				
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Water Temp: °C	WATED CAMPIE DATA			,			•	
Specific Conductance:micromhos Method of Measurement: pH: Containers Used (VOA Vial, 1 liter jar etc.): Physical Appearance: Remarks:		_°C		Method of Measur	rement:			
Containers Used (VOA Vial, 1 liter jar etc.): Physical Appearance: Remarks:	Specific Conductance:		_micromhos	Method of Measur	ement:			
Physical Appearance: Remarks:				•				
Remarks:								
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URS OPERATING SERVICE	s, inc.		onitoring ampling			Records Manageme	ent Data
Project Number 0202-00 Well/Borehole Number MW-	500 51	Project Name Naple Well/Borehole	es truc	k Stop		Page Static Water Level	of ft.
Sampling Metho	vation D	ATA 7. 7	· · · · · · · · · · · · · · · · · · ·	Weather:	F°): 97	-hot	
(from casing 2) Static Water (casing top el 3) Depth to Wel	top as marked) Level Elevation evation minus			Product obs:		☐ Yes	□ No
4) Height of Wa (3 minus 1) Volume of water	ter Column (h):		gals	h. "			
Amount of Water Method of Water WELL PURG Method: Date:	Removed from Removal:V	n Well: C		Was Well Pun Total Volume/Tin		⋈ Yes	□ No
Time		Conductivity	pH	Turbidity	Removed	Flow Rate	Observations
WATER SAM		°C	\	Method of Measu	rement:		
Water Temp: Specific Conducts pH: Containers Used (Physical Appearan Remarks:	VOA Vial, 1 lite	er jar etc.):		Method of Measu			
Recorded By:		Date	*	Checked By:		Date	e:

Date:

Records Management Data Monitoring Well URS OPERATING SERVICES, INC. Sampling Data Project Name Project Number Japles 0202-0002 Static Water Level Well/Borehole Location Well/Borehole Number ft. MW-1 Elevation: Sample No.: _ Weather: Sampling Method: __ Bar. Pres.: _ WATER ELEVATION DATA Method of Measurement:_ 1) Depth Water Surface: _ (from casing top as marked) 2) Static Water Level Elevation: (casing top elevation minus 1) ☐ Yes □ No Product obs: 3) Depth to Well Bottom: _ (from casing top as marked) Depth to Product: 9.6 4) Height of Water Column (h): _ Method of Measurement: _ (3 minus 1) Volume of water in Well: (x) (h) = 6.7(for 2" x = 0.163 gal/ft fp(4" x = 0.653 gal/ft)
Amount of Water Removed from Well: ☐ Yes Was Well Pumped Dry? No. Method of Water Removal: hand ball WELL PURGE DATA Method:__ Total Volume/Time: Date: Flow Rate Observations Turbidity Removed pН Conductivity Time 58.0 1.66 ppt 3.32m5 WATER SAMPLE DATA Method of Measurement: Water Temp:__ Method of Measurement: __ micromhos Specific Conductance: _ Containers Used (VOA Vial, 1 liter jar etc.):___ Physical Appearance:_ Remarks:

Checked By:

Date:

Recorded By:

Monitoring Well

Records Management Data

OPERATING SERVICES, INC.	Sampling	Data		
Project Number	Project Name Naples Tr	ck Stop	Page	
Vell/Borehole Number	Well/Borehole Location	سرك ١٥١٠	Static Water Level	<u></u>
MW-08			ft	-
Sample No.: MW-08		Elevation:		· .
Sampling Method:	· :	Weather: Sumu	t	_
Bar. Pres.:		Amb. Temp. (F°):	<u> </u>	
WATER ELEVATION DAT				
1) Depth Water Surface:	۲. (ه	Method of Measurement:	· · · · · · · · · · · · · · · · · · ·	<u> </u>
(from casing top as marked)		•		
2) Static Water Level Elevation:				
(casing top elevation minus 1)			D v	
3) Depth to Well Bottom:	3. Z'	Product obs:	☐ Yes	3
(from casing top as marked)				ı
	5. (-	Depth to Product:		.
 Height of Water Column (h): (3 minus 1) 		Method of Measurement:		_
Volume of water in Well: (x) (h) =	0 9728			
(for 2" v = 0.163 nol/ft for 4" v	- 0 653 gal/fr)			
Amount of Water Removed from V	Vell: 3 9 a	,	D	•
Method of Water Removal:	and bail	Was Well Pumped Dry?	☐ Yes ☐ No	
WELL PURGE DATA				
Method:	·	·	·	_
Date:		_ Total Volume/Time:		-
Time Temp of F		Turbidity Removed		<u>s</u>
1555 66,0	2.58µS 7.90	1.30ppt 3 ga	<u> </u>	- ·
<u> </u>				-
				-
·				-
		· · ·	· · · · · · · · · · · · · · · · · · ·	.
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		<u> </u>	-	-
WATER SAMPLE DATA				
Water Temp:°	c	Method of Measurement:		_
Specific Conductance:		Method of Measurement:		-
pH:Containers Used (VOA Vial, 1 liter j			. •	
Physical Appearance:		<u> </u>		-
Remarks:				_
accorded Ruy	Date	Checked Rv:	I Date:	

URS OPERATING SERVICES, INC.	Monitoring Sampling	Records Management Data	
Project Number OZOZ-CCC Well/Borehole Number MW -10	Project Name Project Name Well/Borehole Location	nck Stop	Page of Static Water Level ft.
Sample No.: MW - Sampling Method: Bar. Pres.: WATER ELEVATION 1) Depth Water Surface (from casing top as not casing top elevation) 2) Static Water Level Elevation (casing top elevation) 3) Depth to Well Bottom (from casing top as not case	:	Elevation: Weather:	□ Yes □ No
Amount of Water Remov Method of Water Remov WELL PURGE DAT	ed from Well: 5.5 al: Nandbail A	Was Well Pumped Dry?	XA Yes □ No
Method: Date:		Total Volume/Time:	
	PF Conductivity pH 7.37.	Turbidity Removed O 8540 5.590 Method of Measurement:	Flow Rate Observations
Specific Conductance: pH: Containers Used (VOA Vi Physical Appearance: Remarks:	micromhos al, 1 liter jar etc.):	Method of Measurement:	Date:
Recorded By:	Date:	CHECKEU DY:	1 5

APPENDIX B

Validation Reports and Laboratory Data

USEPA Contract Laboratory Program Generic Chain of Custody

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	29	12	7	_	
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4	7	77/	70	_	_

L37893

Reference Case		_
Client No:		1
SDG No:		

	Date Shipped:			Chain of Custo	ody Record	Signature:		For Lab Use Or	nly
	Carrier Name:	URS		Relinquished By	(Date / Time)	Received By	(Date / Time)	Lab Contract No:	
	Airbill:			458716D	HEY 0Z 1Z00	Gerry Dend	\$18/02 12:0Up	Unit Price:	
	Shipped to:	ACZ 2773 Downhill Driv		2		/		Transfer To:	
1		Steamboat Springs 80487	CO	3					
- 1		(800) 334-4549		4				Lab Contract No:	
L	and the second s			<u> </u>				Unit Price:	
	SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE	STATION LOCATION	SAMPLE COLL DATE/TIME		FOR LAB USE ONLY Sample Condition On Receipt
PĪ	NT9-MW-01	Ground Water/	-LC	-8260 (21), TVPH (21)	- 91 (HCL), 82 (HCL), 8		S: 6/17/2002		
		Beesi-Treitz			(HCL), 84 (HOL), 85 — (HGL), 80 (HGL) (6	}	-E: 6/18/2002 -		•
- 10	BO-WM-STN	Ground Water/ Becci Treitz	[L/G	8260 (21), TVPH (21)	810 (HCL), 811 (HCL) 812 (HCL), 87 (HCL), 8), NTS-MW-08 8	S: 6/17/2002 /6 E: 6/18/2002	00	
= 2	TINK NTS-MW-10	. Ground Water/	L/G	8260 (21), TVPH (21)	(HCL), 89 (HCL) (6 813 (HCL), 814 (HCL)		S: 6/17/2002 /6	75	•
-(Becci Treitz			815 (HCL), 816 (HCL)	,	E: 6/18/2002	, -,	
<i>u</i> 3	NTS-MW-10	Ground Water/	L/G	8260 (21), TVTH (23)	817 (HCL), 818 (HCL) (6 819 (HCL), 820 (HCL)	, NTS-MW-10 MS	S: 6/17/2002	25	
σ,	MS 🔇	Becci Treitz		10.4	821 (HCL), 822 (HCL) 823 (HCL), 824 (HCL) (6		E: 6/18/2002		
a 4	NTS-MW-10	Ground Water/	ĽG	8260 (21), 7477 (21)	825 (HCL), 826 (HCL) 827 (HCL), 828 (HCL)	NTS-MW-10 MSD	S: 6/17/2002	25	
•	MSD (2)	Becci Treitz		•	829 (HCL), 830 (HCL) (6		E. 0/10/2002	_	
# 5·	NTS-MW-14	Ground Water/ Becci Treitz	L/G	8260 (21), TVPH (21)	831 (HCL), 832 (HCL) 833 (HCL), 834 (HCL		S: 6/17/2002 j 5	335	
	W	Decci Heitz			835 (HČL), 836 (HČL) (6	3)		411.5	
~ 6.	NTS-MW-20	Ground Water/ Becci Treitz	L/G	8260 (21), TVPH (21)	837 (HCL), 838 (HCL 839 (HCL), 840 (HCL		S: 6/17/2002	540	
				0000 /04) TV/BU /24)	841 (HCL), 842 (HCL) (6 843 (HCL), 844 (HCL		s: 6/17/2002)4	M)	
47	、NTS-MW-21	Ground Water/ Becci Treitz	ľ/G	8260 (21), TVPH (21)	845 (HCL), 846 (HCL),	E: 6/18/2002		•
	NITOMINOS	Ground Water/	- 40	0260 (21), TVPH (21)	847 (HCL), 848 (HCL) (849 (HCL), 850 (HCL		6: 6/17/2002		•
	2	- Bossi Traitz			851 (HCL), 852 (HCL	1	E: 0/18/2002		,
	NTS-MW-23		1/0		853 (HOL), 854 (HCL) (855 (HCL), 856 (HCL). NTS MW 23	S: 6/17/2002		•
	E	Becci Treitz			837 (HOL), 858 (HCL) 859 (HCL), 860 (HCL) (E: 6/18/2002		
ſ	Shipment for Complete?N	ase Sample(s) to be u	sed for laboratory QC:	Additional Sam	pler Signature(s):	Cooler Temp Upon Receip		ustody Seal Number:
	Combieratid							· [

Type/Designate:Composite = C, Grab = G

TR Number: 8-540638614-061202-0001

8260 = Volatile Organics, TVPH = Total Petroleum Hydrocarbons - Gasoline Ran

Analysis Key:

Concentration: L = Low, M = Low/Medium, H = High

LABORATORY COPY

Custody Seal Intact?

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Contract Laboratory Analytical Services Support, 2000 Edmund Halley Dr., Reston, VA. 20191-3436 Phone 703/264-9348 Fax 703/264-9222

F2V5.0.66 Page 1 of 2

Shipment Iced?_

0	EF	A

USEPA Contract Laboratory Program Generic Chain of Custody

Reference	Case
lient No:	

lient No:	
DG No:	

	Date Shipped: 6/18/2002			Chain of Custody Record		Sampler Signature.		For Lab Use Only		
1	Carrier Name:	UHS	١	Relinquished By		Received By	(Date / Time)	Lab Contract No: _		
	Airbill: Shipped to:	ACZ	\	1 Asaux	6/10/02, 1700	Gennelmph	16/18/12 12:11p	Unit Price:		
	ompres to.	2773 Downhill Drive Steamboat Springs		2		1 10		Transfer To:		
		80487 (800) 334-4549	, ,	3				Lab Contract No:		
		(000) 334-4348		4				Unit Price:		
,	SAMPLE No.	MATRIX/ . SAMPLER	CONC/ TYPE		TAG No.J PRESERVATIVE	STATION LOCATION	SAMPLE COLL DATE/TIME		FOR LAB USE ONLY o. Sample Condition On Receipt	
<i>■</i> 8.	NTS-VMP-02	Ground Water/ Becci Treitz	L/G	8260 (21), TVPH (21)	861 (HCL), 862 (HCL), 863 (HCL), 864 (HCL), 865 (HCL), 866 (HCL) (6)	j.	S: 6/17/2002 E: 6/18/2002	440		

Shipment for Case Complete?N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal N	lumber:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = H	ligh Type/Designate:Composite = C, Grab	= G	Custody Seal Intact?	Shipment Iced?
8260 = Volatile Organic	s, TVPH = Total Petroleum Hydrocarbons - Gasoline	Ran			

PR provides preliminary results. Requests for preliminary results will increase analytical costs. Send Copy to: Contract Laboratory Analytical Services Support, 2000 Edmund Halley Dr., Reston, VA. 20191-3436 Phone 703/264-9348 Fax 703/264-9222

F2V5.0.66 Page 2 of 2





TECHLAW INC.

PHONE: (303) 763-7188

FAX: (303) 763-4896

September 5, 2002

Mr. Kent Alexander URS Operating Services 1099 18th Street, Suite 710 Denver, CO 80202

RE: Transmittal of Data Validation Report

Naples Truck Stop TDD No. 0202-0002 Report No. L37293

Dear Mr. Alexander:

Please find enclosed one validation report for TDD No. 0202-0002 for the Naples Truck Stop project. This report is for the validation of volatile organic and total petroleum hydrocarbon analyses. Additionally, the missing data, which was provided by the laboratory in .pdf format, has been emailed to you electronically.

If you have any questions regarding the enclosed report, please contact me at (303) 763-7188.

Yours sincerely, TECHLAW, INC.

Lisa Tyson Staff Consultant

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enclosure IF: 01027-092



REGION VIII DATA VALIDATION REPORT **ORGANICS**

TDD No.	Site I	Name	Operable Unit
0202-0002	Naples Truck Stop)	
RPM/OSC Name			
Hays Griswold			
Contractor Laboratory	Contract No.	Job No.	Laboratory DPO/Region
ACZ Laboratories Inc.	Not Indicated	L37293	

Review Assigned Date _____August 2, 2002 Data Validator Bill Fear Review Completion Date September 5, 2002 Report Reviewer Lisa Tyson

Station Number	Laboratory ID	Matrix	Analysis
NTS-MW-08	L37293-01	Water	Volatile Organics and Total Petroleum Hydrocarbons (TVH) analyses by SW- 846 Methods 8260B and 8015B
NTS-MW-10	L37293-02		
NTS-MW-14	L37293-05		
NTS-MW-20	L37293-06		
NTS-MW-21	L37293-07		
NTS-VMP-02	L37293-08		



DATA QUALITY STATEMENT

()	Data are ACCEPTABLE according to added by the reviewer.	EPA Function	onal Guidelines with no qualifiers (flags)
()	Data are UNACCEPTABLE accordin	g to EPA Fur	actional Guidelines.
(X)	Data are acceptable with QUALIFICA	ATIONS note	d in review.
Telepl	hone/Communication Logs Enclosed?	Yes	NoX
TPO A	Attention Required? Yes	No X	_ If yes, list the items that require attention:



ORGANIC DATA VALIDATION REPORT **REVIEW NARRATIVE SUMMARY**

This data package was reviewed according to the EPA document "USEPA Contract Laboratory Program National Functional Guidelines For Organic Data Review,"October 1999, modified for the methods used.

Raw data were reviewed for completeness and transcription accuracy onto the summary forms. Approximately 10-20% of the results reported in each of the samples, calibrations, and QC analyses were recalculated and verified. If problems were identified during the recalculation of results, a more thorough calculation check was performed.

The data package, TDD No.0202-0002, Job No. L37293 consisted of six water samples for volatile and TVH organic analyses by SW-846 Methods 8260B and 8015B.

The laboratory performed a library search on the non-target sample components. TICs reported in both samples and blanks were rejected (R). The following tables list data qualifiers added to the data. (Please see Data Qualifier Definitions, attached to the end of this report.)

Sample Number	Volatile Compound	Qualifier	Reason For Qualification	Review Section
All samples	Methylene chloride Vinyl acetate 1,3-Dichloropropane m/p- Xylene o-Xylene Styrene 1,3-Dichlorobenzene 4-Isopropyl toluene	J/UJ	Initial calibration %RSDs exceeded 15%	4

Sample Number	тун	Qualifier	Reason For Qualification	Review Section
NTS-MW-08, NTS-MW-10, NTS-MW-14, NTS-VMP-02	TVH	J	Holding times exceeded	2
All samples			Continuing calibration %D exceeded 15%	3
NTS-MW-14, NTS-MW-20, NTS-MW-21		U .	Blank contamination	6

0.100	perdung Corvices, inc.
Metho Revision	d Number8260 onB
	Organic Data Completeness Checklist VOA
<u>P</u>	y Control Summary Package Surrogate Recovery Summary MS/MSD or LCS Summary Method Blank Summary GC/MS Tuning and Mass Calibration
<u>P</u>	Organic Analysis Data Sheets Reconstructed Ion Chromatogram(s) (RIC) Quantitation Reports Mass Spectral Data
NR R P P	rds Data Package Current List of Laboratory/Instrument Detection Limits Initial Calibration Data for each instrument Continuing Calibration Data for each instrument Internal Standard Area Summary VOA Standards RICs VOA Standards Quantitation Reports
Raw Q <u>R</u>	C Package BFB mass spectra and mass listings
<u>P</u> <u>P</u>	RIC or Total Ion Chromatogram Quantitation Reports Mass Spectral Data
P P P NA	Spike/Matrix Spike Duplicate Data Organic Analysis Data Sheets RIC Quantitation Reports Mass Spectral Data Library search for TICs
KEY: P R NP NR	 = Provided in original data package = Provided as resubmission = Not provided in original data package or as resubmission = Not required = Not applicable to this data package or analysis



1	DEL	IVER	ART	FC
1.		11 V F.K	ADI	

All	deliveral	oles	were	present	as	specified	in	the	subcontract
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VOA: Yes___ No_X_

Comments: This data package was submitted in an electronic format rather than as a hard

copy. Data for the 06/06/02 tune and initial calibration were not provided. The

laboratory was contacted and the data were received electronically.

2. HOLDING TIMES AND PRESERVATION CRITERIA

All holding times and preservation criteria were met.

VOA: Yes X No_

Comments: The water samples were analyzed within 7 days from sample collection. The

samples were received at the laboratory within the 4 ± 2 °C temperature criteria. No shipping or receiving problems were noted. Chain-of-custody, summary forms, and

raw data were evaluated.

3. BFB PERFORMANCE RESULTS

The bromofluorobenzene (BFB) performance results were within the specified control limits. All appropriate BFB results were included.

VOA: Yes_X No___

Comments: BFB instrument performance checks were run for each 12 hours of analysis. Ion

abundance criteria were met and were verified from raw data.

4. INSTRUMENT CALIBRATIONS: INITIAL AND CONTINUING STANDARDS

Initial instrument calibrations were performed according to method requirements and met the project specified control limits.

VOA: Yes___ No_X

Comments: The initial calibration relative response factors (RRFs) for the SPCCs met the

minimum RRF method requirements and the RRFs for all other volatile target compounds and surrogate compounds were greater than or equal to 0.01. The percent relative standard deviations (%RSDs) for the CCC compounds were less

than or equal to 30%. Summary forms and raw data were evaluated.

The following table lists the percent relative standard deviations (%RSDs) that exceeded 15% for the non-CCC compounds and qualifiers added to the data:

Compound	%RSD	Associated Samples	Qualifiers
Methylene chloride	16.4	All samples	J/UJ
Vinyl acetate	18.9		
1,3-Dichloropropane	15.2		
m/p Xylene	17.0		
o-Xylene	16.8		
Styrene	15.5	,	
1,3-Dichlorobenzene	16.1		
4-Isopropyl toluene	15.8		

Continuing instrument calibrations were performed according to method requirements and met project specified control limits.

VOA: Yes_X_ No___

Comments:

Continuing calibration standards containing both target compounds and surrogate compounds were analyzed at the beginning of each 12-hour analysis period. Continuing calibration RRFs for the SPCCs met the minimum RRF method requirements, and the RRFs for all other volatile target compounds and surrogate compounds were greater than or equal to 0.01. The percent differences (%Ds) for the CCCs were less than the 20% method criteria. (%Ds were not evaluated for non-CCC compounds.) Summary forms and raw data were evaluated.

5. SURROGATE COMPOUND RECOVERY

Surrogate compound recovery analysis was performed according to method requirements and results met project specified control limits.

VOA: Yes X No___

Comments:

Surrogate spikes were added to all samples and blanks. All recoveries were

within QC limits. Form 1s and raw data were evaluated.

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Matrix Spike/Matrix Spike Duplicate (MS/MSD) and blank spike/blank spike duplicate (BS/BSD) analyses were performed according to method requirements and results met recommended recovery and precision limits.

VOA: Yes___ No_X

Comments:

MS/MSD analyses were performed on sample NTS-MW-10. The laboratory also performed a laboratory control sample (LCS) analyses. All percent recoveries and relative percent differences (RPDs) were within the laboratory QC limits for the LCS analyses. Summary forms and raw data were evaluated were evaluated.

The following table lists the results for the MS/MSD analyses that were outside criteria; however, no action is taken based solely on MS/MSD data:

Sample			Percent Recovery RI		Control Limits		Qualifiers	
	MS	MSD		% R	RPD			
NTS-MW-10	Benzene	43%	0%	18	76-127	14	None	

The sample result for benzene was greater than 4 times the spiking level and therefore, the recoveries for benzene should be considered not applicable.

7. INTERNAL STANDARD AREA

Internal standard area analysis was performed according to method requirements and results met specified control limits.

VOA: Yes X No___

Comments:

Internal standard area counts did not vary by more than a factor of two from the associated 12-hour calibration standard. The internal standard retention times did not vary more than \pm 30 seconds from the retention time of the associated 12-hour calibration standards. Summary forms and raw data were evaluated.

8. LABORATORY BLANK ANALYSIS RESULTS

The laboratory blank analysis was performed according to method requirements and results met specified limits.

VOA: Yes X No_

Comments:

A method blank analysis was performed after the calibration standards and once for every 12-hour time period beginning with a BFB analysis. Summary forms and raw data were evaluated.

The method blank was not contaminated with target compounds.

TICs were not reported for these analyses.



9. SAMPLE RESULTS

The sample results were reviewed and all compound identifications were acceptable and met contract requirements.

VOA: Yes_X_ No__

Comments:

Sample relative retention times (RRTs) were within \pm 0.06 RRT units of the standard RRT. Ions present in the standard mass spectrum at a relative intensity greater than 10% were present in the sample spectrum. Relative intensities of ions agreed within \pm 30% between standard and sample spectra. All samples results and reporting limits were correctly calculated.

Benzene and ethylbenzene are reported from a five times dilution for sample NTS-MW-10.

Sample NTS-VMP-02 was analyzed at a five times dilution.

10. Additional Comments or Problems/Resolutions Not Addressed Above

VOA: Yes__ No_X

Comments: None.

Method Number 8015

Revision B

Organic Data Completeness Checklist TPH-PURGEABLES

Quality Control Summary Package

- P Surrogate Recovery Summary
- P MS/MSD or LCS Summary
- P Method Blank Summary

Sample Data Package

- P Holding Times (CLASS Sample Traffic Reports/UOS Chain-of-Custody)
- P Organic Analysis Data Sheets
- P GC Chromatogram(s)

Standards Data Package

- NR Current List of Laboratory/Instrument Detection Limits
- R Initial Calibration Summary
- P Continuing Calibration Summary
- P Analytical Sequence
- P Standard Chromatograms and Data System Printouts

Reagent Blank Data

- P Organic Analysis Data Sheets
- P GC Chromatograms and Data System Printouts

Matrix Spike/Matrix Spike Duplicate Data

- P Organic Analysis Data Sheets
- P GC Chromatograms and Data System Printouts

KEY:

- P = Provided in original data package
- R = Provided as resubmission
- NP = Not provided in original data package or as resubmission
- NR = Not required
- NA = Not applicable to this data package or analysis

1. DELIVERABLES

All deliverables were present as specified in the subcontract.

TPH-Purgeables:

Yes

No_X_

Comments:

The initial calibration data was not in the data package. The laboratory was contacted and the data were received electronically.

Incorrect results were initially reported, as the samples were reported with units of mg/L, but the results were not corrected from the ug/L raw data values. As a result, the values were wrong by a factor of 1000. The corrected results were resubmitted by the laboratory.

2. HOLDING TIMES AND PRESERVATION CRITERIA

All holding times and preservation criteria were met.

TPH-Purgeables:

Yes

No_X_

Comments:

The COC indicated that the samples were preserved with HCl; however, the instrument run log indicated that samples NTS-MW-08, NTS-MW-10, NTS-MW-14, and NTS-VMP-02 were not properly preserved to a pH <2.

The following table lists the samples analyzed outside the seven day holding time for unpreserved water samples, days outside holding time, and qualifiers added to the data:

Associated Sample	Days Analyzed Outside Holding Time	Analyte	Qualifiers
NTS-MW-08	1	TVH	J
NTS-MW-10			
NTS-MW-14	,		
NTS-VMP-02			

The remaining samples were properly preserved and were analyzed within 14 days of collection. The temperature at the time of sample receipt was within the recommended temperature range of $4\pm2^{\circ}$ C. Chain-of-custody, summary forms, and raw data were evaluated.



3. INSTRUMENT CALIBRATIONS: INITIAL AND CONTINUING STANDARDS

Initial instrum limits.	ent calibrations	were perf	Formed according to requirements and me	et specified control
TPH-Purgeab	les: Yes_	<u>X</u>	No	
Comments:	percent relativ	ve standar	were performed according to the met d deviations (%RSDs) were less than or e was greater than 0.990. Summary forms	equal to 20% or the
Continuing in control limits.		ations wer	re performed according to requirements	and met specified
TPH-Purgeabl	es: Yes_	_	No_X_	
Comments:	Continuing ca	libration	standards were analyzed at the required t	requency.
			ts the percent differences (%Ds) for concontinuing calibrations and the qualifiers	
Compou	ind	%D	Associated Samples	Qualifiers
Compo t H	ind	% D	Associated Samples All samples	Qualifiers J/UJ
H	E COMPOUNI pound recovery a	18% D RECOV	All samples	J/UJ
SURROGAT Surrogate com met specified o	E COMPOUNI pound recovery a control limits. es: Yes	D RECOV analysis w X npounds weries (%Rs	All samples VERY vas performed according to method requir	J/UJ rements and results
SURROGAT Surrogate commet specified of TPH-Purgeable Comments:	E COMPOUNI pound recovery a control limits. es: Yes	18% D RECOV analysis w X pounds weries (%Rs	All samples VERY vas performed according to method requir No vere added to all samples and QC samples were all within the laboratory QC limits	J/UJ rements and results
SURROGAT Surrogate commet specified of TPH-Purgeable Comments: MATRIX SPI Matrix Spike/I	E COMPOUNI pound recovery a control limits. es: Yes	analysis wax apounds waries (%Rs luated. SPIKE Dauplicate (1)	All samples VERY vas performed according to method requir No vere added to all samples and QC samples were all within the laboratory QC limits	eements and results es. The surrogate Form 1s and raw

5.



Comments:

MS/MSD analyses were not performed for this SDG. However, the laboratory analyzed a laboratory control sample (LCS) and duplicate (LCSD). All percent recoveries and relative percent differences (RPDs) were within the laboratory QC limits for the LCS/LCSD analyses. Summary forms and raw data were evaluated.

The incorrect units were reported for the LCS analysis. Based on the value reported, the units should be ug/L. This was still not corrected with the laboratory resubmission.

6. LABORATORY BLANK ANALYSIS RESULTS

The laboratory blank analysis was performed according to method requirements and met specified control limits.

TPH-Purgeables:

Yes

No_X

Comments:

Method blanks were analyzed at the proper frequency. Summary forms and raw data

were evaluated.

Contamination was detected in the blanks as summarized in the following table. Quantitation limits in the associated samples were raised in accordance with the rules set forth in the "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review," October 1999.

Blank Target Compounds

Blank ID	Contaminant	Concentration Found in Blank (mg/L)	Associated Samples	Concentration Found in Sample (mg/L)	Qualifier/ Adjustment
Prep Blank	TVH	0.027	NTS-MW-14 NTS-MW-20 NTS-MW-21	0.026 0.026 0.023	0.05 U

7. SAMPLE RESULTS

The sample results were reviewed and all compound identifications were acceptable and met method requirements.

TPH-Purgeables:

Yes___

No_X

Comments:

The results were initially reported incorrectly. The laboratory resubmitted the sample results. No other problems were identified with compound identification and

quantitation.

8. Additional Comments or Problems/Resolutions Not Addressed Above

TPH-Purgeables:

Yes___

No_X_

Comments:

None.

ORGANIC DATA QUALITY ASSURANCE REVIEW

Region VIII

DATA QUALIFIER DEFINITIONS

For the purpose of Data Validation, the following code letters and associated definitions are provided for use by the data validator to summarize the data quality.

GENERAL QUALIFIERS for use with both INORGANIC and ORGANIC DATA

- R Reported value is "rejected." Resampling or reanalysis may be necessary to verify the presence or absence of the compound.
- J The associated numerical value is an estimated quantity because the Quality Control criteria were not met.
- U J The reported quantitation limit is estimated because Quality Control criteria were not met. Element or compound was not detected.
- N J Estimated value of a tentatively identified compound. ORGANICS analysis only.
- U The material was analyzed for, but was not detected above the level of the associated value.

 The associated value is either the sample quantitation limit or the sample detection limit.

Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Analytical Results

URS Operating Services, Inc.

Project ID:

600143/OS02P8122

Sample ID:

NTS-MW-08

ACZ ID:

L37293-01

Date Sampled:

06/17/02 16:00

Date Received: 06/18/02

Sample Matrix: Surface Water

Volatile Organics by GC/MS

Analysis Method: **Extract Method:**

M8260B

Method

Analyst:

Extract Date:

06/20/02 11:44

Analysis Date:

06/20/02 11:44

Dilution Factor:

Com	pound	t

1,3-Dichloropropane 000142-28-9 U ug/L 4 10 U 1,4-Dichlorobenzene 000106-46-7 U ug/L 4 10 2,2-Dichloropropane 000594-20-7 U ug/L 4 10 2-Butanone 000078-93-3 U ug/L 10 30 2-Chloroethyl vinyl ether 000110-75-8 U ug/L 50 100 2-Chlorotoluene 000095-49-8 U ug/L 4 10 2-Hexanone 000591-78-6 U ug/L 10 30 4-Chlorotoluene 000106-43-4 U ug/L 10	Compound	CAS	Result 👉 QUAL	Units ME	L CPQL
1.1.2.2-Tetrachlcroethane	1,1,1,2-Tetrachloroethane	000630-20-6	U	ug/L 4	10
1,12-Trichloroethane	1,1,1-Trichloroethane	000071-55-6	U	ug/L 10	0 30
1,1-Dichloroethane	1,1,2,2-Tetrachloroethane	000079-34-5	U	ug/L 3	10
1,1-Dichlorosthene 000075-35-4 U ug/L 4 10 1,1-Dichloropropene 000563-86-6 U ug/L 4 10 1,2,3-Trichlorobenzene 000087-61-6 U ug/L 4 10 1,2,3-Trichlorobenzene 000096-18-4 U ug/L 4 10 1,2,4-Trichlorobenzene 000120-82-1 U ug/L 4 10 1,2,4-Trichlorobenzene 000956-33-6 U ug/L 4 10 1,2-Dibromo-3-chloropropane 000096-12-8 U ug/L 4 10 1,2-Dibromo-3-chloropropane 000108-3-4 U ug/L 4 10 1,2-Dibriorobenzene 000108-6-1-8 U ug/L 4 10 1,2-Dichloropropane 000108-6-2 U ug/L 4 10 1,3-Dichloropropane 000108-6-8 U ug/L 4 10 1,3-Dichlorobenzene 000148-73-1 U ug/L 4 10 1,3-Dichlorobenzene 00016-6-8 U ug/L 4 10 1,3	1,1,2-Trichloroethane	000079-00-5	Ü	ug/L 4	10
1.1-Dichloropropane 000583-58-6 U ug/l. 4 10 1.2,3-Trichlorobenzene 000087-61-6 U ug/l. 4 10 1.2,3-Trichloropropane 000098-18-4 U ug/l. 4 10 1.2,4-Trichlorobenzene 000120-82-1 U ug/l. 3 10 1.2,4-Trichlorobenzene 000095-63-6 U ug/l. 4 10 1.2-Dibromo-3-chloropropane 000096-12-8 U ug/l. 4 10 1.2-Diblorome-3-chloropropane 000106-93-4 U ug/l. 4 10 1.2-Dichlorobenzene 000095-50-1 U ug/l. 4 10 1.2-Dichlorobenzene 000107-06-2 U ug/l. 4 10 1.2-Dichloropropane 000108-67-8 U ug/l. 4 10 1.3-Dichlorobenzene 000108-67-8 U ug/l. 4 10 1.3-Dichloropropane 000142-28-9 U ug/l. 4 10 1.3-Dichloropropane 00016-48-7 U ug/l. 4 10 1.3-Dichlorobenzene 00016-48-7 U ug/l. 4 10 2-Dichloropropane 000078-83-3 U ug/l. 4 10 2-Dichloropropane 000078-93-3 U ug/l. 10 30 2-Chlorothyl vinyl ether 00010-75-8 U ug/l. 10 30 2-Chlorotoluene 00009-81-9 U ug/l. 4 10 4-Hothyl-2-Pentanne	1,1-Dichloroethane	000075-34-3	U	ug/L 4	10
1,1-Dichloropropene	1,1-Dichloroethene	000075-35-4	U	ug/L 4	10
1.2.3-Trichloropropane	1,1-Dichloropropene	000563-58-6	Ú		10
1,2,4-Trichlorobenzene 000120-82-1 U ug/L 3 10 1,2,4-Trimethylbenzene 00098-63-8 U ug/L 4 10 1,2-Dibromoethane 000098-61-2-8 U ug/L 4 10 1,2-Dibromoethane 000108-93-4 U ug/L 4 10 1,2-Dibromoethane 000098-50-1 U ug/L 4 10 1,2-Dibromoethane 000098-70-1 U ug/L 4 10 1,3-Frimethylbenzene 000098-73-1 U ug/L 4 10 1,3-Frimethylbenzene 00018-67-8 U ug/L 4 10 1,3-Frimethylbenzene 000041-22-9 U ug/L 4 10 1,3-Dibromoethane 000042-28-9 U ug/L 4 10 1,3-Dibromoethane 00008-40-7 U ug/L 4 10 1,3-Dibromoethane 00008-40-7 U ug/L 4 10 2,2-Dibromoene 00008-40-3-3 U ug/L 4 10 2,2-Dibromoene 00009-83-3 U ug/L 4 10 2-Chlorothuene 000098-89-8 U ug/L 4 10 2-Chlorothuene 000098-78-8 U ug/L 4 10 2-Chlorothuene 000098-78-8 U ug/L 4 10 2-Chlorothuene 000098-79-9 U ug/L 4 10 4-Mothyl-2-Pentanone 000098-79-9 U ug/L 4 10 4-Mothyl-2-Pentanone 000098-79-1 U ug/L 4 10 4-Mothyl-2-Pentanone 000071-3-2 U ug/L 4 10 4-Mothyl-2-Pentanone 000078-8-1 U ug/L 4 10 4-Mothyl-2-Pentanone 000071-3-2 U ug/L 4 10 Benzene 000071-3-2 U ug/L 4 10 Bromoberzene 000074-8-7-5 U ug/L 4 10 Bromoberzene 000075-27-4 U ug/L 4 10 Bromoderinene 000075-27-4 U ug/L 4 10	1,2,3-Trichlorobenzene	000087-61-6	U	ug/L 4	10
1.2-A-Trimethylbenzene	1,2,3-Trichloropropane	000096-18-4	· U	ug/L 4	10
1,2-Dibromo-3-chloropropane 00096-12-8	1,2,4-Trichlorobenzene	000120-82-1	, U	ug/L 3	10
1,2-Dibromoethane	1,2,4-Trimethylbenzene	000095-63-6	U	ug/L 4	10
1,2-Dichlorobenzene	1,2-Dibromo-3-chloropropane	000096-12-8	Ú	ug/L 4	10
1,2-Dichloroethane	1,2-Dibromoethane	000106-93-4	· U	ug/L 4	10
1,2-Dichloropropane	1,2-Dichlorobenzene	000095-50-1	U	ug/L 4	10
1,3,5-Trimethylbenzene 000108-67-8 U ug/L 4 10 1,3-Dichlorobenzene 000541-73-1 U ug/L 4 10 U 1,3-Dichloropropane 000142-28-9 U ug/L 4 10 U 1,4-Dichloropropane 000106-46-7 U ug/L 4 10 2,2-Dichloropropane 000594-20-7 U ug/L 4 10 2-Butanone 000078-93-3 U ug/L 50 100 2-Chlorothyl vinyl ether 00010-75-8 U ug/L 4 10 2-Chlorotoluene 000095-49-8 U ug/L 4 10 2-Hosanone 000591-78-6 U ug/L 4 10 4-Chlorotoluene 00016-43-4 U ug/L 4 10 4-Isopropyltoluene 000099-87-9 U ug/L 4 10 4-Methyl-2-Pentanone 000108-10-1 U ug/L 4 10 Actone 000076-64-1 U ug/L 4 10 Actone 0	1,2-Dichloroethane	000107-06-2	U	ug/L 4	10
1,3-Dichlorobenzene	1,2-Dichloropropane	000078-87-5	U	ug/L 4	10
1,3-Dichloropropane	1,3,5-Trimethylbenzene	000108-67-8	บ	ug/L 4	
1,4-Dichlorobenzene 000108-46-7 U ug/L 4 10 2,2-Dichloropropane 000594-20-7 U ug/L 4 10 2-Butanone 000078-93-3 U ug/L 10 30 2-Chloroethyl vinyl ether 000110-75-8 U ug/L 50 100 2-Chlorotoluene 000095-49-8 U ug/L 4 10 2-Hexanone 000591-78-6 U ug/L 4 10 4-Chlorotoluene 000108-43-4 U ug/L 4 10 4-Isopropyltoluene 000098-87-9 U ug/L 4 10 4-Methyl-2-Pentanone 000108-10-1 U ug/L 40 100 Aczlone 00008-84-9 U ug/L 40 100 Aczlonitrile 00007-1-3-1 U ug/L 20 40 Benzene 000071-43-2 U ug/L 20 40 Bromobenzene 000074-97-5 U ug/L 4 10 Bromochloromethane 000075-27-4 U ug/L 4 10 Br	1,3-Dichlorobenzene	000541-73-1	U	ug/L 4	10 ひ~
2,2-Dichloropropane 000594-20-7 U ug/L 4 10 2-Butanone 000078-93-3 U ug/L 10 30 2-Chloroethyl vinyl ether 000110-75-8 U ug/L 50 100 2-Chlorotoluene 000095-49-8 U ug/L 4 10 2-Hexanone 000591-78-6 U ug/L 4 10 4-Chlorotoluene 000106-43-4 U ug/L 4 10 4-Isopropyltoluene 000098-87-9 U ug/L 4 10 4-Methyl-2-Pentanone 000108-10-1 U ug/L 40 100 Acetone 000067-64-1 U ug/L 10 30 Acrylonitrile 000107-13-1 U ug/L 20 40 Benzene 000071-43-2 U ug/L 4 10 Bromochloromethane 000108-86-1 U ug/L 4 10 Bromochloromethane 000075-27-4 U ug/L 4 10 Bromoform 000075-25-2 U ug/L 4 10 Bromomethane 000075-25-2 U ug/L 4 10 Carbon Disulfide 000075-25-0 U ug/L 4 10 Carbon Tetrachloride 000068-23-5 U ug/L 4 10 <tr< td=""><td>1,3-Dichloropropane</td><td>000142-28-9</td><td>U</td><td>ug/L 4</td><td>10 47.</td></tr<>	1,3-Dichloropropane	000142-28-9	U	ug/L 4	10 47.
2-Butanone 000078-93-3 U ug/L 10 30 2-Chloroethyl vinyl ether 000110-75-8 U ug/L 50 100 2-Chloroethyl vinyl ether 000095-49-8 U ug/L 50 100 2-Chlorotoluene 000095-49-8 U ug/L 10 30 4-Chlorotoluene 000591-78-6 U ug/L 10 30 4-Chlorotoluene 000099-87-9 U ug/L 4 10 4-Isopropyltoluene 000099-87-9 U ug/L 40 100 Acetone 000098-87-9 U ug/L 40 100 Acetone 000096-64-1 U ug/L 10 30 Acrylonitrile 000107-13-1 U ug/L 10 30 Acrylonitrile 000107-13-1 U ug/L 20 40 Benzene 000088-86-1 U ug/L 4 10 Bromobenzene 000108-86-1 U ug/L 4 10 Bromobenzene 000074-97-5 U ug/L 4 10 Bromochloromethane 000075-27-4 U ug/L 4 10 Bromoform 000075-27-4 U ug/L 4 10 Bromoform 000075-27-4 U ug/L 4 10 Carbon Disulfide 000075-83-9 U ug/L 4 10 Carbon Disulfide 000075-15-0 U ug/L 4 10 Carbon Tetrachloride 000075-00-3 U ug/L 4 10 Chloroethane 000075-00-3 U ug/L 4 10 Chloroethane 000075-60-3 U ug/L 4 10 Chloroethane 000074-87-3 U ug/L 4 10 Chloroethane 000074-87-3 U ug/L 4 10 Chloroethane 000075-60-3 U ug/L 4 10 Chloroethane 000074-87-3 U ug/L 4 10 Chloroethane 000168-59-2 U ug	1,4-Dichlorobenzene	000106-46-7	U	ug/L 4	10
2-Chloroethyl vinyl ether 000110-75-8 U ug/L 50 100 2-Chlorotoluene 000095-49-8 U ug/L 4 10 2-Hexanone 000591-78-6 U ug/L 10 30 4-Chlorotoluene 00016-43-4 U ug/L 4 10 4-Isopropyltoluene 000108-10-1 U ug/L 4 10 4-Isopropyltoluene 000108-10-1 U ug/L 40 100 Acetone 000067-64-1 U ug/L 10 30 Acylonitrile 00007-13-1 U ug/L 20 40 Benzene 000098-86-1 U ug/L 4 10 Bromobenzene 000074-97-5 U ug/L 4 10 Bromodichloromethane 000074-97-5 U ug/L 4 10 Bromodichloromethane 000075-27-4 U ug/L 4 10 Bromoform 000075-27-4 U ug/L 4 10 Bromoform 000075-25-2 U ug/L 4 10 Carbon Disulfide 000075-15-0 U ug/L 4 10 Carbon Disulfide 000075-15-0 U ug/L 4 10 Carbon Tetrachloride 000075-00-3 U ug/L 4 10 Chloroethane 000075-00-3 U ug/L 4 10 Chloroform 000075-66-3 U ug/L 4 10 Chloromethane 000074-87-3 U ug/L 4 10 Chloroform 000075-66-3 U ug/L 4 10 Chloromethane 000074-87-3 U ug/L 4 10 Chloroform 000075-66-3 U ug/L 4 10 Chloromethane 000074-87-3 U ug/L 4 10 Chloroform 000074-87-3 U ug/L 4 10 Chloroform 000075-66-3 U ug/L 4 10 Chloroform 000074-87-3 U ug/L 4 10 Chloroform 000074-87-3 U ug/L 4 10 Chloromethane 000074-87-3 U ug/L 4 10 Chloroethane 000074-87-3 U ug/L 4 10 Chloromethane 000074-87-3 U ug/L 4 10 Chloroethane 000074-87-3 U ug/L 4 10 Chloromethane 000074-87-3 U ug/L 4 10 Chloromethane 000074-87-3 U ug/L 4 10 Chloroethane 000074-87-3 U ug/L 4 10	2,2-Dichloropropane	000594-20-7	· U	ug/L 4	10
2-Chlorotoluene 000095-49-8 U ug/L 4 10 2-Hexanone 000591-78-6 U ug/L 10 30 4-Chlorotoluene 000106-43-4 U ug/L 4 10 4-Isopropyltoluene 000099-87-9 U ug/L 4 10 4-Isopropyltoluene 000108-10-1 U ug/L 40 100 Acetone 000067-64-1 U ug/L 10 30 Acrylonitrile 000107-13-1 U ug/L 20 40 Benzene 000071-43-2 U ug/L 4 10 Bromobenzene 000108-86-1 U ug/L 4 10 Bromobenzene 000074-97-5 U ug/L 4 10 Bromodichromethane 000074-97-5 U ug/L 4 10 Bromodichromethane 000075-27-4 U ug/L 4 10 Bromomethane 000075-27-4 U ug/L 4 10 Bromomethane 000075-25-2 U ug/L 4 10 Carbon Disulfide 000075-15-0 U ug/L 4 10 Carbon Disulfide 000075-15-0 U ug/L 4 10 Carbon Tetrachloride 000076-23-5 U ug/L 4 10 Chlorobenzene 000108-90-7 U ug/L 4 10 Chlorotorne 000076-66-3 U ug/L 4 10 Chlorotethane 000074-87-3 U ug/L 4 10 Cis-1,2-Dichloroethene 000074-87-3 U ug/L 4 10 cis-1,2-Dichloropropene 010061-01-5 U ug/L 4 10 cis-1,3-Dichloropropene	2-Butanone	000078-93-3	Ü	ug/L 10	0 30
2-Hexanone 000591-78-6 U ug/L 10 30 4-Chlorotoluene 000106-43-4 U ug/L 4 10 4-Isopropyltoluene 000099-87-9 U ug/L 4 10 4-Methyl-2-Pentanone 000108-10-1 U ug/L 40 100 Acetone 000067-64-1 U ug/L 10 30 Acrylonitrile 000107-13-1 U ug/L 20 40 Benzene 000071-43-2 U ug/L 4 10 Bromobenzene 000074-97-5 U ug/L 4 10 Bromochloromethane 000074-97-5 U ug/L 4 10 Bromodichloromethane 000075-27-4 U ug/L 4 10 Bromoform 000075-25-2 U ug/L 4 10 Bromomethane 000074-83-9 U ug/L 4 10 Carbon Disulfide 000075-15-0 U ug/L 4 10 Carbon Tetrachloride 000056-23-5 U ug/L 4 10 Carbon Tetrachloride 000056-23-5 U ug/L 4 10 Chlorobenzene 000074-87-3 U ug/L 4 10 Chlorotomethane 000074-87-3 U ug/L 4 10 Chlorotethane 000074-87-3 U ug/L 4 10 Cis-1,3-Dichloropropene 010061-01-5 U ug/L 4 10	2-Chloroethyl vinyl ether	000110-75-8	υ	ug/L 50	0 100
4-Chlorotoluene 000106-43-4 U ug/L 4 10 4-Isopropyitoluene 000099-87-9 U ug/L 4 10 4-Methyl-2-Pentanone 000108-10-1 U ug/L 40 100 Acctone 000067-64-1 U ug/L 10 30 Acrylonitrile 000017-13-1 U ug/L 2 40 Benzene 000071-43-2 U ug/L 4 10 Bromobenzene 00108-86-1 U ug/L 4 10 Bromochloromethane 000074-97-5 U ug/L 4 10 Bromoform 000075-27-4 U ug/L 4 10 Bromomethane 000074-83-9 U ug/L 4 10 Carbon Disulfide 000075-15-0 U ug/L 4 10 Carbon Tetrachloride 00005-23-5 U ug/L 4 10 Chlorobenzene 000075-00-3 U ug/L 4 10 Chloroform 000067-66-3 U ug/L 4<	2-Chlorotoluene	000095-49-8	υ	ug/L 4	10
4-Isopropyltoluene 000099-87-9 U ug/L 4 4 10 CA 4-Methyl-2-Pentanone 000108-10-1 U ug/L 40 100 Acetone 000067-64-1 U ug/L 20 40 Acrylonitrile 000107-13-1 U ug/L 20 40 Benzene 000071-43-2 U ug/L 4 10 Bromobenzene 000078-86-1 U ug/L 4 10 Bromochloromethane 000074-97-5 U ug/L 4 10 Bromoform 000075-27-4 U ug/L 4 10 Bromomethane 000074-83-9 U ug/L 4 10 Carbon Disulfide 000075-15-0 U ug/L 4 10 Carbon Tetrachloride 000056-23-5 U ug/L 4 10 Chlorobenzene 000108-90-7 U ug/L 4 10 Chloroform 000075-00-3 U ug/L 4 10 Chloromethane 000074-87-3 U ug/L 4 10 Chloromethane 000074-87-3 U ug/L 4 10 cis-1,2-Dichloroethene 000156-59-2 U ug/L 4 10 cis-1,3-Dichloropropene 010061-01-5 U ug/L 4 <td< td=""><td>2-Hexanone</td><td>000591-78-6</td><td>U</td><td>ug/L 10</td><td>0 30</td></td<>	2-Hexanone	000591-78-6	U	ug/L 10	0 30
4-Methyl-2-Pentanone 000108-10-1 U ug/L 40 100 Acetone 000067-64-1 U ug/L 10 30 Acrylonitrile 000107-13-1 U ug/L 20 40 Benzene 000071-43-2 U ug/L 4 10 Bromobenzene 000108-86-1 U ug/L 4 10 Bromochloromethane 000074-97-5 U ug/L 4 10 Bromoform 000075-27-4 U ug/L 4 10 Bromomethane 000075-25-2 U ug/L 4 10 Carbon Disulfide 000074-83-9 U ug/L 4 10 Carbon Tetrachloride 000075-15-0 U ug/L 4 10 Carbon Tetrachloride 000056-23-5 U ug/L 4 10 Chlorobenzene 000108-90-7 U ug/L 4 10 Chloroform 000075-00-3 U ug/L 4 10 Chloroform 000074-87-3 U ug/L 4 10 Chloromethane 000075-00-3 U ug/L 4 10 Chloromethane <	4-Chlorotoluene	000106-43-4	U	ug/L 4	
Acetone 000067-64-1 U ug/L 10 30 Acrylonitrile 000107-13-1 U ug/L 20 40 Benzene 000071-43-2 U ug/L 4 10 Bromobenzene 000108-86-1 U ug/L 4 10 Bromochloromethane 000074-97-5 U ug/L 4 10 Bromoform 000075-27-4 U ug/L 4 10 Bromomethane 000075-25-2 U ug/L 4 10 Carbon Disulfide 000074-83-9 U ug/L 4 10 Carbon Tetrachloride 000075-15-0 U ug/L 4 10 Carbon Tetrachloride 000056-23-5 U ug/L 4 10 Chlorobenzene 000108-90-7 U ug/L 4 10 Chlorotethane 000075-00-3 U ug/L 4 10 Chloroform 00006-66-3 U ug/L 4 10 Chloromethane 000074-87-3 U ug/L 4 10 cis-1,2-Dichloroethene 000156-59-2 U ug/L 4 10 cis-1,3-Dichloropropene 010061-01-5 U ug/L 4 10	4-Isopropyltoluene	000099-87-9	. U	ug/L 4	10
Acrylonitrile 000107-13-1 U ug/L 20 40 Benzene 000071-43-2 U ug/L 4 10 Bromobenzene 000108-86-1 U ug/L 4 10 Bromochloromethane 000074-97-5 U ug/L 4 10 Bromodichloromethane 000075-27-4 U ug/L 4 10 Bromoform 000075-25-2 U ug/L 4 10 Bromomethane 000074-83-9 U ug/L 4 10 Carbon Disulfide 000075-15-0 U ug/L 4 10 Carbon Tetrachloride 000056-23-5 U ug/L 10 30 Chlorobenzene 000108-90-7 U ug/L 4 10 Chloroethane 000075-00-3 U ug/L 4 10 Chloromethane 000074-87-3 U ug/L 4 10 Chloromethane 000074-87-3 U ug/L 4 10 cis-1,2-Dichloroethene 000156-59-2 U ug/L 4 10 cis-1,3-Dichloropropene 010061-01-5 U ug/L 4 10	4-Methyl-2-Pentanone	000108-10-1	U	ug/L 40	0 100
Benzene 000071-43-2 U ug/L 4 10 Bromobenzene 000108-86-1 U ug/L 4 10 Bromochloromethane 000074-97-5 U ug/L 4 10 Bromodichloromethane 000075-27-4 U ug/L 4 10 Bromoform 000075-25-2 U ug/L 4 10 Bromomethane 000074-83-9 U ug/L 4 10 Carbon Disulfide 000075-15-0 U ug/L 4 10 Carbon Tetrachloride 000056-23-5 U ug/L 4 10 Chlorobenzene 000108-90-7 U ug/L 4 10 Chloroethane 000075-00-3 U ug/L 4 10 Chloromethane 000074-87-3 U ug/L 4 10 Cis-1,2-Dichloroethene 000156-59-2 U ug/L 4 10 cis-1,3-Dichloropropene 010061-01-5 U ug/L 4 10	Acetone	000067-64-1	U	ug/L 10	30
Bromobenzene 000108-86-1 U ug/L 4 10 Bromochloromethane 000074-97-5 U ug/L 4 10 Bromodichloromethane 000075-27-4 U ug/L 4 10 Bromoform 000075-25-2 U ug/L 4 10 Bromomethane 000074-83-9 U ug/L 4 10 Carbon Disulfide 000075-15-0 U ug/L 4 10 Carbon Tetrachloride 000056-23-5 U ug/L 10 30 Chloroberzene 000108-90-7 U ug/L 4 10 Chloroethane 000075-00-3 U ug/L 4 10 Chloroform 000067-66-3 U ug/L 4 10 Chloromethane 000074-87-3 U ug/L 4 10 cis-1,2-Dichloroethene 000156-59-2 U ug/L 4 10 cis-1,3-Dichloropropene 010061-01-5 U ug/L 4 10	Acrylonitrile	000107-13-1		ug/L 20	D 40
Bromochloromethane 000074-97-5 U ug/L 4 10 Bromodichloromethane 000075-27-4 U ug/L 4 10 Bromoform 000075-25-2 U ug/L 4 10 Bromomethane 000074-83-9 U ug/L 4 10 Carbon Disulfide 000075-15-0 U ug/L 4 10 Carbon Tetrachloride 000056-23-5 U ug/L 10 30 Chlorobenzene 000108-90-7 U ug/L 4 10 Chloroethane 000075-00-3 U ug/L 4 10 Chloroform 000067-66-3 U ug/L 4 10 Chloromethane 000074-87-3 U ug/L 4 10 cis-1,2-Dichloroethene 000156-59-2 U ug/L 4 10 cis-1,3-Dichloropropene 010061-01-5 U ug/L 4 10	Benzene	000071-43-2	Ū	ug/L 4	10
Bromodichloromethane 000075-27-4 U ug/L 4 10 Bromoform 000075-25-2 U ug/L 4 10 Bromomethane 000074-83-9 U ug/L 4 10 Carbon Disulfide 000075-15-0 U ug/L 4 10 Carbon Tetrachloride 000056-23-5 U ug/L 10 30 Chlorobenzene 000108-90-7 U ug/L 4 10 Chloroethane 000075-00-3 U ug/L 4 10 Chloroform 000067-66-3 U ug/L 4 10 Chloromethane 000074-87-3 U ug/L 4 10 cis-1,2-Dichloroethene 000156-59-2 U ug/L 4 10 cis-1,3-Dichloropropene 010061-01-5 U ug/L 4 10	Bromobenzene	000108-86-1	U	ug/L 4	10
Bromoform 000075-25-2 U ug/L 4 10 Bromomethane 000074-83-9 U ug/L 4 10 Carbon Disulfide 000075-15-0 U ug/L 4 10 Carbon Tetrachloride 000056-23-5 U ug/L 10 30 Chlorobenzene 000108-90-7 U ug/L 4 10 Chloroethane 000075-00-3 U ug/L 4 10 Chloroform 000067-66-3 U ug/L 4 10 Chloromethane 000074-87-3 U ug/L 4 10 cis-1,2-Dichloroethene 000156-59-2 U ug/L 4 10 cis-1,3-Dichloropropene 010061-01-5 U ug/L 4 10	Bromochloromethane	000074-97-5	U	ug/L 4	10
Bromomethane 000074-83-9 U ug/L 4 10 Carbon Disulfide 000075-15-0 U ug/L 4 10 Carbon Tetrachloride 000056-23-5 U ug/L 10 30 Chlorobenzene 000108-90-7 U ug/L 4 10 Chloroethane 000075-00-3 U ug/L 4 10 Chloroform 000067-66-3 U ug/L 4 10 Chloromethane 000074-87-3 U ug/L 4 10 cis-1,2-Dichloroethene 000156-59-2 U ug/L 4 10 cis-1,3-Dichloropropene 010061-01-5 U ug/L 4 10	Bromodichloromethane	000075-27-4	U	ug/L 4	10
Carbon Disulfide 000075-15-0 U ug/L 4 10 Carbon Tetrachloride 000056-23-5 U ug/L 10 30 Chlorobenzene 000108-90-7 U ug/L 4 10 Chloroethane 000075-00-3 U ug/L 4 10 Chloroform 000067-66-3 U ug/L 4 10 Chloromethane 000074-87-3 U ug/L 4 10 cis-1,2-Dichloroethene 000156-59-2 U ug/L 4 10 cis-1,3-Dichloropropene 010061-01-5 U ug/L 4 10	Bromoform	000075-25-2	U	ug/L 4	10
Carbon Tetrachloride 000056-23-5 U ug/L 10 30 Chlorobenzene 000108-90-7 U ug/L 4 10 Chloroethane 000075-00-3 U ug/L 4 10 Chloroform 000067-66-3 U ug/L 4 10 Chloromethane 000074-87-3 U ug/L 4 10 cis-1,2-Dichloroethene 000156-59-2 U ug/L 4 10 cis-1,3-Dichloropropene 010061-01-5 U ug/L 4 10	Bromomethane	000074-83-9	U	ug/L 4	10
Chlorobenzene 000108-90-7 U ug/L 4 10 Chloroethane 000075-00-3 U ug/L 4 10 Chloroform 000067-66-3 U ug/L 4 10 Chloromethane 000074-87-3 U ug/L 4 10 cis-1,2-Dichloroethene 000156-59-2 U ug/L 4 10 cis-1,3-Dichloropropene 010061-01-5 U ug/L 4 10	Carbon Disulfide	000075-15-0	U	ug/L 4	10
Chloroethane 000075-00-3 U ug/L 4 10 Chloroform 000067-66-3 U ug/L 4 10 Chloromethane 000074-87-3 U ug/L 4 10 cis-1,2-Dichloroethene 000156-59-2 U ug/L 4 10 cis-1,3-Dichloropropene 010061-01-5 U ug/L 4 10	Carbon Tetrachloride	000056-23-5	U	ug/L 10	0 30
Chloroform 000067-66-3 U ug/L 4 10 Chloromethane 000074-87-3 U ug/L 4 10 cis-1,2-Dichloroethene 000156-59-2 U ug/L 4 10 cis-1,3-Dichloropropene 010061-01-5 U ug/L 4 10	Chlorobenzene	000108-90-7	U	ug/L 4	10
Chloromethane 000074-87-3 U ug/L 4 10 cis-1,2-Dichloroethene 000156-59-2 U ug/L 4 10 cis-1,3-Dichloropropene 010061-01-5 U ug/L 4 10	Chloroethane	000075-00-3	U	ug/L 4	10
cis-1,2-Dichloroethene 000156-59-2 U ug/L 4 10 cis-1,3-Dichloropropene 010061-01-5 U ug/L 4 10	Chloroform		Ü	ug/L 4	10
cis-1,2-Dichloroethene 000156-59-2 U ug/L 4 10 cis-1,3-Dichloropropene 010061-01-5 U ug/L 4 10	Chloromethane	000074-87-3	· U	-	· · 10
cis-1,3-Dichloropropene 010061-01-5 U ug/L 4 10	cis-1,2-Dichloroethene	000156-59-2	U	_	10
Dibromochloromethane 000124-48-1 U ug/L 4 10	cis-1,3-Dichloropropene	010061-01-5	· U	-	10
	Dibromochloromethane	000124-48-1	U	ug/L 4	10

REPOR.01.01.01.02

L37293: Page 4 of 32

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Analytical Results

URS Operating Services, Inc.

Project ID:

600143/OS02P8122

Sample ID:

NTS-MW-08

ACZ ID: L37293-01

Date Sampled: 06/17/02 16:00

Date Received: 06/18/02

Sample Matrix: Surface Water

Dibromomethane	000074-95-3		U	ug/L	4	10	
Dichlorodifluoromethane	000075-71-8		U	ug/L	5	20	
Ethylbenzene	000100-41-4		U	ug/L	4	10	
Hexachlorobutadiene	000087-68-3		υ	ug/L	4	10	
Isopropylbenzene	000098-82-8		U	ug/L	4	10	
m,p-Xylene	001330 20 7		U	ug/L	10	30	ひろ
Methyl Tert Butyl Ether	001634-04-4	61		ug/L	4	10	
Methylene Chloride	000075-09-2		U	ug/L	4	10	43
Naphthalene	000091-20-3		U	ug/L	3	10	• •
n-Butylbenzene	000104-51-8		U	ug/L	4	10	
n-Propylbenzene	000103-65-1		U	ug/L	4	10	
o-Xylene	000095-47-6		U	ug/L	4	10	ムづ
sec-Butylbenzene	000135-98-8		U	ug/L	4	10	
Styrene	000100-42-5		U	ug/L	4	10	61-7
tert-Butylbenzene	000098-06-6		U	ug/L	4	10	
Tetrachloroethene	000127-18-4		U	ug/L	4	10	
Toluene	000108-88-3	-	U	ug/L	4	10	
trans-1,2-Dichloroethene	000156-60-5		U	ug/L	4	10	
trans-1,3-Dichloropropene	010061-02-6		U	ug/L	3	10	
Trichloroethene	000079-01-6		U	ug/L	5	20	
Trichlorofluoromethane	000075-69-4		U	ug/L	4	10	
Vinyl Acetate	000108-05-4		U	ug/L	4	10	ひろ
Vinyl Chloride	000075-01-4		U	ug/L	4	10	

Surrogate Recoveries

Surrogate	CAS	% Recovery	Units	LCL	UCL
Bromofluorobenzene	000460-00-4	108	%	86	115
Dibromofluoromethane	001868-53-7	106	%	86	118
Toluene-d8	002037-26-5	98	%	88	110

of 8(30) #2

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Analytical Results

URS Operating Services, Inc.

Project ID:

600143/OS02P8122

Sample ID:

NTS-MW-10

ACZ ID:

L37293-02

Date Sampled: 06/17/02 16:25

Date Received: 06/18/02

Sample Matrix: Surface Water

Volatile Organics by GC/MS

Analysis Method:

M8260B

Extract Method:

Method

Analyst: jj

Extract Date: 06/20/02 12:25 Analysis Date: 06/20/02 12:25

Dilution Factor: 1

Benzene / Ethylbenzone SX

Compound		Date	,	.(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		- •	
Compound	CAS	Result '	QUAL	Units	MDL	PQL	
1,1,1,2-Tetrachloroethane	000630-20-6		U	ug/L	4	10	
1,1,1-Trichloroethane	000071-55-6		U	ug/L	10	30	
1,1,2,2-Tetrachloroethane	000079-34-5		U	ug/L	3	10	
1,1,2-Trichloroethane	000079-00-5		U	ug/L	4	10	
1,1-Dichloroethane	000075-34-3	•	U	ug/L	4	10	
1,1-Dichloroethene	000075-35-4		U	ug/L	4	10	
1,1-Dichloropropene	000563-58-6		U	ug/L	4	10	
1,2,3-Trichlorobenzene	000087-61-6		U	ug/L	4	10	
1,2,3-Trichloropropane	000096-18-4		U	ug/L	4	10	
1,2,4-Trichlorobenzene	000120-82-1		U	ug/L	3	10	
1,2,4-Trimethylbenzene	000095-63-6	142		ug/L	4	10	
1,2-Dibromo-3-chloropropane	000096-12-8	**	U	ug/L	4	10	
1,2-Dibromoethane	000106-93-4		U	ug/L	4	10	
1,2-Dichlorobenzene	000095-50-1		U	ug/L	4	10	
1,2-Dichloroethane	000107-06-2	26		ug/L	4	10	
1,2-Dichloropropane	000078-87-5		U	ug/L	4	10	
1,3,5-Trimethylbenzene	000108-67-8	18		ug/L	4	10	
1,3-Dichlorobenzene	000541-73-1		υ	ug/L	4	10	U
1,3-Dichloropropane	000142-28-9		υ	ug/L	4	10	ü
1,4-Dichlorobenzene	000106-46-7		υ	ug/L	4	10	
2,2-Dichloropropane	000594-20-7		U	ug/L	4	10	
2-Butanone	000078-93-3		บ	. ug/L	10	30	
2-Chloroethyl vinyl ether	000110-75-8		U	ug/L	50	100	
2-Chlorotoluene	000095-49-8		U	ug/L	4	10	
2-Hexanone	000591-78-6		U	ug/L	10	30	
4-Chlorotoluene	000106-43-4		U	ug/L	4	10	
4-isopropyltoluene	000099-87-9		U	ug/L	4	10	W
4-Methyl-2-Pentanone	000108-10-1		U	ug/L	40	100	
Acetone	000067-64-1		U	ug/L	10	30	
Acrylonitrile	000107-13-1		U.	ug/L	20	40	
Benzene	000071-43-2	1490		ug/L	20	50	
Bromobenzene	000108-86-1		U	ug/L	4	10	
Bromochloromethane	000074-97-5		U	ug/L	4	10	
Bromodichloromethane	000075-27-4		U	ug/L	4	10	
Bromoform	000075-25-2		U	ug/L	4	10	
Bromomethane	000074-83-9		U	ug/L	4	10	
Carbon Disulfide	000075-15-0		U	ug/L	4	10	
Carbon Tetrachloride	000056-23-5		U	ug/L	10	30	
Chiorobenzene	000108-90-7		U	ug/L	4	10	
Chloroethane	000075-00-3		Ü	ug/L	4	10	
Chloroform	000067-66-3		U	ug/L	4	10	
Chloromethane	000074-87-3		U	ug/L	4	10	
cis-1,2-Dichloroethene	000156-59-2		U	ug/L	4	10	
cis-1,3-Dichloropropene	010061-01-5		Ù	ug/L	4	10	
Dibromochloromethane	000124-48-1		U	ug/L	4	10	

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Analytical Results

URS Operating Services, Inc.

Project ID:

600143/OS02P8122

Sample ID:

NTS-MW-10

ACZ ID: L37293-02

Date Sampled: 06/17/02 16:25

Date Received: 06/18/02

Sample Matrix: Surface Water

Dibromomethane	000074-95-3		U	ug/L	4	10	
Dichlorodifluoromethane	000075-71-8		U	ug/L	5	20	
Ethylbenzene	000100-41-4	500		ug/L	20	50	
Hexachlorobutadiene ·	000087-68-3		υ	ug/L	4	10	
Isopropylbenzene	000098-82-8	6	J	ug/L	4	10	
m,p-Xylene	001330 20 7	150 - [*]		ug/L	10	30	ゴ
Methyl Tert Butyl Ether	001634-04-4		U	ug/L	4	10	
Methylene Chloride	000075-09-2		U	ug/L	4	10	U
Naphthalene	000091-20-3	9	J	ug/L	3	10	• •
n-Butylbenzene	000104-51-8		U	ug/L	4	10	
n-Propylbenzene	000103-65-1	63		ug/L	4	10	
o-Xylene	000095-47-6	7 ·	J	ug/L	4	10	7
sec-Butylbenzene	000135-98-8	•,	U	ug/L	4	10	
Styrene	000100-42-5		U	ug/L	4	10	CVS
tert-Butylbenzene	000098-06-6		U	ug/L	4	10	
Tetrachloroethene	000127-18-4		Ú	ug/L	4	10	
Toluene	000108-88-3	19		ug/L	4	10	
trans-1,2-Dichloroethene	000156-60-5	•	U	ug/L	4	10	
trans-1,3-Dichloropropene	010061-02-6		U	ug/L	3	10	
Trichloroethene	000079-01-6		U	ug/L	5	20	
Trichlorofluoromethane	000075-69-4		U	ug/L	4	10	
Vinyl Acetate	000108-05-4		U	ug/L	4	10	$\mathcal{C}\mathcal{L}$
Vinyl Chloride	000075-01-4		U	ug/L	4	10	

Surrogate Recoveries

Surrogate	CAS	% Recovery	Units	LCL	UCL	
Bromofluorobenzene	000460-00-4	104	%	86	115	
Dibromofluoromethane	001868-53-7	100	%	86	118	
Toluene-d8	002037-26-5	96.5	%	88	110	

REPOR.01.01.01.02

L37293: Page 8 of 32

2773 Downhill Drive Steamboat Springs, CO 80487

(800) 334-5493

Organic Analytical Results

URS Operating Services, Inc.

Project ID:

600143/OS02P8122

Sample ID:

NTS-MW-14

ACZ ID: L37293-05

06/17/02 15:35 Date Sampled:

06/18/02 Date Received:

Surface Water Sample Matrix:

Volatile Organics by GC/MS

Analysis Method:

M8260B

Extract Method:

Method

Analyst: jj

Extract Date: 06/20/02 14:28

Analysis Date: 06/20/02 14:28

Dilution Factor: 1

Compound Compound	CAS	Result	QUAL	Units	MDL	PQL	
.1.1,2-Tetrachloroethane	000630-20-6		U	ug/L	4	10	
.1.1-Trichloroethane	000071-55-6		U	ug/L	10	30	
,1,2,2-Tetrachloroethane	000079-34-5		U	ug/L	3	10	
	000079-00-5		υ	ug/L	4	10	
,1,2-Trichloroethane	000075-34-3		U	ug/L	4	10	
,1-Dichloroethane	000075-35-4		U	ug/L	4	10	
,1-Dichloroethene	000563-58-6		U	ug/L	4	- 10	•
,1-Dichloropropene	000087-61-6		Ü	ug/L	4	10	
,2,3-Trichlorobenzene	000087-01-0		ŭ	ug/L	4	10	
,2,3-Trichloropropane	# = = = = · · ·		Ü	ug/L	3	10	
,2,4-Trichlorobenzene	000120-82-1		Ü	ug/L	4	10	
,2,4-Trimethylbenzene	000095-63-6		Ü	ug/L ug/L	4	10	
,2-Dibromo-3-chloropropane	000096-12-8		Ü	•	4	10	
,2-Dibromoethane	000106-93-4		_	ug/L	4	10	
,2-Dichlorobenzene	000095-50-1		U	ug/L	4	10	
,2-Dichloroethane	000107-06-2		U	ug/L	•		
,2-Dichloropropane	000078-87-5		U	ug/L	4	10	
I,3,5-Trimethylbenzene	000108-67-8		U	ug/L	4	10	
1,3-Dichlorobenzene	000541-73-1	-	U	ug/L	4.	10	
1,3-Dichloropropane	000142-28-9		U	ug/L	4	10	
1.4-Dichlorobenzene	000106-46-7		υ	ug/L	4	10	
2.2-Dichloropropane	000594-20-7		U	ug/L	4	10	
2-Butanone	000078-93-3		U	ug/L	10	30	
	000110-75-8		·U	ug/L	50	100	
2-Chloroethyl vinyl ether	000095-49-8		U	ug/L	4	10	
2-Chlorotoluene	000591-78-6		U	ug/L	10	30	
2-Hexanone	000106-43-4		U	ug/L	4	10	
4-Chlorotoluene	000099-87-9		Ū	ug/L	4	10	1
4-Isopropyitoluene	000033-07-3		Ū	ug/L	40	100	
4-Methyl-2-Pentanone	* * * * * * * * * * * * * * * * * * * *		Ü	ug/L	10	30	
Acetone	000067-64-1		Ü	ug/L	20	40	
Acrylonitrile	000107-13-1	,	U	ug/L	4	10	
Benzene	000071-43-2		U ·	ug/L ug/L	4	10	
Bromobenzene	000108-86-1		U		4	10	
Bromochloromethane	000074-97-5		_	ug/L		10	
Bromodichloromethane	000075-27-4		U	ug/L	4		
Bromoform	000075-25-2		U	ug/L	4	10	
Bromomethane	000074-83-9		U	ug/L	4	10	
Carbon Disulfide	000075-15-0	*	υ	ug/L	4	10	
Carbon Distinide Carbon Tetrachloride	000056-23-5		U	ug/L	10	30	
Carpon Tetrachionde Chiorobenzene	000108-90-7		U	ug/L	4	10	
	000075-00-3		υ	ug/L	4	10	
Chloroethane	000067-66-3		U	ug/L	4	10	
Chloroform	00007-00-3		Ü	ug/L	4	10	
Chloromethane	000074-87-3		Ü	ug/L	4	10	
cis-1,2-Dichloroethene	010061-01-5		Ü	ug/L	4	10	
cis-1,3-Dichloropropene		•	U	ug/L	4	10	
Dibromochloromethane	000124-48-1		U	ugrL			

REPOR.01.01.01.02

₩6/3/2 L37293: Page 14 of 32

AGZ Laboratories, Inc. 2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Analytical Results

URS Operating Services, Inc.

Project ID:

600143/OS02P8122

Sample ID:

NTS-MW-14

ACZ ID: L37293-05

06/17/02 15:35

Date Sampled: Date Received:

06/18/02

Sample Matrix:

Surface Water

						
Dibromomethane	000074-95-3	U	ug/L	4	10	
Dichlorodifluoromethane	000075-71-8	U	ug/L	5	20	
Ethylbenzene	000100-41-4	U	ug/L	4	10	
Hexachlorobutadiene	000087-68-3	U	ug/L	4	10	
Isopropylbenzene	000098-82-8	U	ug/L	4	10	_
m,p-Xylene	001330 20 7	U	ug/L	10	30	ムゴ
Methyl Tert Butyl Ether	001634-04-4	U	ug/L	4	10	. —
Methylene Chloride	000075-09-2	U	ug/L	4	10	ムシ
•	000091-20-3	U	ug/L	3	10	
Naphthalene	000104-51-8	U	ug/L	4	10	
n-Butylbenzene	000103-65-1	Ū	ug/L	4	10	
n-Propylbenzene	000103-03-1	ΰ	ug/L	4	10	こと
o-Xylene	000135-98-8	Ū	ug/L	4	10	_
sec-Butylbenzene	000100-42-5	Ü	ug/L	4	10	こと
Styrene		Ü	ug/L	4	10	013
tert-Butylbenzene	000098-06-6		_	-	10	
Tetrachloroethene	000127-18-4	U	ug/L	4		
Toluene	000108-88-3	U	ug/L	4	10	
trans-1,2-Dichloroethene	000156-60-5	υ	ug/L	4	10	
trans-1,3-Dichloropropene	010061-02-6	U	ug/L	3	10	
Trichloroethene	000079-01-6	υ	ug/L	5	20	
Trichlorofluoromethane	000075-69-4	U	ug/L	4	10	
Vinyl Acetate	000108-05-4	U	ug/L	4	10	رين
Vinyl Chloride	000075-01-4	U	ug/L	4	10	
7 II 17 1 O I II O I I I I						

Surrogate Recoveries

Our rogulo i todo rei roc			CONTRACTOR SOUND TO SECURE AND ADDRESS OF THE PARTY AND ADDRESS OF THE	4.1	and the second second
Surrogate	CAS	% Recovery	Units	LCL	UCL
Bromofluorobenzene	000460-00-4	100	%	86	115
Dibromofluoromethane	001868-53-7	92.7	%	86	118
Toluene-d8	002037-26-5	96.7	%	88	110

TE 8(30/02

2773 Downhill Drive Steamboat Springs, CO 80487

(800) 334-5493

Organic Analytical Results

URS Operating Services, Inc.

Project ID:

600143/OS02P8122

Sample ID:

NTS-MW-20

ACZ ID: L37293-06

06/17/02 15:40 Date Sampled:

06/18/02 Date Received:

Sample Matrix: Surface Water

Volatile Organics by GC/MS

Analysis Method:

M8260B

Extract Method:

Method

Analyst:

Extract Date: 06/20/02 15:09

Analysis Date: 06/20/02 15:09

Dilution Factor:

Compound

compound	CAS Re	sult , QUAL	Units	MDL	PQL
PROGRAMMA among the angle of the control of the programma and the control of the	000630-20-6	U	ug/L	4	10
,1,1,2-Tetrachioroethane	000071-55-6	U	ug/L	10	30
,1,1-Trichloroethane	000071-33-5	Ū	ug/L	3	10
,1,2,2-Tetrachloroethane	000079-00-5	· U	ug/L	4	10
,1,2-Trichloroethane	000075-34-3	U	ug/L	4	10
,1-Dichloroethane	000075-35-4	Ü	ug/L	4	10
,1-Dichloroethene	000563-58-6	Ü	ug/L	4	10
,1-Dichloropropene	000083-38-6	Ū	ug/L	4	10
,2,3-Trichlorobenzene	000087-01-0	Ū	ug/L	4	10
,2,3-Trichloropropane	000120-82-1	Ū	ug/L	3	10
,2,4-Trichlorobenzene	000120-02-1	. Ū	ug/L	4	10
,2,4-Trimethylbenzene	000095-65-6	Ŭ	ug/L	4	10
,2-Dibromo-3-chloropropane	000106-93-4	Ü	ug/L	4	10
,2-Dibromoethane		· Ū	ug/L	4	10
2-Dichlorobenzene	000095-50-1	Ü	ug/L	4	10
,2-Dichloroethane	000107-06-2	Ü	ug/L	4	10
,2-Dichloropropane	000078-87-5	Ü	ug/L	4	10
,3,5-Trimethylbenzene	000108-67-8	Ü	ug/L	4	10
,3-Dichlorobenzene	000541-73-1	. Ü	ug/L	4	10
3-Dichloropropane	000142-28-9	. U	_	4	10
,4-Dichlorobenzene	000106-46-7	U	ug/L ug/L	4	10
2-Dichloropropane	000594-20-7	U	_	10	30
Butanone	000078-93-3		ug/L		100
Chloroethyl vinyl ether	000110-75-8	U .	ug/L	50 4	100
-Chlorotoluene	000095-49-8	U	ug/L		30
-Hexanone	000591-78-6	U	ug/L	10	
-Chlorotoluene	000106-43-4	U	ug/L	4	10 10
-Isopropyitoluene	000099-87-9	U	ug/L	4	
-Methyl-2-Pentanone	000108-10-1	U	ug/L	40	100
cetone	000067-64-1	U	ug/L	10	30
Acrylonitrile	000107-13-1	U	ug/L	20	40
enzene	000071-43-2	U	ug/L	4	10
Bromobenzene	000108-86-1	U	ug/L	4	10
Bromochloromethane	000074-97-5	U	ug/L	4	10
Bromodichloromethane	000075-27-4	U	ug/L	4	10
	000075-25-2	υ	ug/L	4	10
Bromoform Bromomethane	000074-83-9	U	ug/L	4	10
Bromomethane	000075-15-0	. U	ug/L	4	10
Carbon Disulfide	000056-23-5	U	ug/L	10	30
Carbon Tetrachloride	000108-90-7	υ	ug/L	4	10
Chlorobenzene	000075-00-3	υ	ug/L	4	10
Chloroethane	000073-60-3	. 0	ug/L	4	10
Chloroform	000074-87-3	Ŭ	ug/L	4	10
Chloromethane	000074-07-3	Ü	ug/L	4	10
cis-1,2-Dichloroethene	010061-01-5	Ü	ug/L	4	10
cis-1,3-Dichloropropene		Ü	ug/L	4	10
Dibromochloromethane	000124-48-1	· ·	ug/ L	•	

REPOR.01.01.01.02

L37293: Page 17 of 32

Mardon

ACZ Laboratories, Inc. 2773 Downhill Drive Steamboat Springs, CO 80487 (8

(800) 334-5493

Organic Analytical Results

URS Operating Services, Inc.

Project ID:

600143/OS02P8122

Sample ID:

NTS-MW-20

ACZ ID:

L37293-06

Date Sampled:

06/17/02 15:40

Date Received:

06/18/02

Sample Matrix:

Surface Water

Dibromomethane	000074-95-3	U	ug/L	4	10	
Dichlorodifluoromethane	000075-71-8	U	ug/L	5	20	
Ethylbenzene	000100-41-4	U	ug/L	4	10	
Hexachlorobutadiene	000087-68-3	U	ug/L	4	10	
Isopropyibenzene	000098-82-8	U	ug/L	4	10	
m,p-Xylene	001330 20 7	U	ug/L	10	30	いろ
Methyl Tert Butyl Ether	001634-04-4	Ū	ug/L	4	10	
Methylene Chloride	000075-09-2	U	ug/L	4	10	ひろ
Naphthalene	000091-20-3	U	ug/L	3	10	
n-Butylbenzene	000104-51-8	U	ug/L	4	10	
n-Propylbenzene	000103-65-1	U	ug/L	4	10	
o-Xylene	000095-47-6	U	ug/L	4	10	いる
sec-Butylbenzene	000135-98-8	U	ug/L	4	10	
Styrene	000100-42-5	U	ug/L	4	10	ひ」
tert-Butylbenzene	000098-06-6	υ	ug/L	4	10	
Tetrachloroethene	000127-18-4	U	ug/L	4	10	
	000108-88-3	U	ug/L	4	10	
Toluene	000156-60-5	U	ug/L	4	10	
trans-1,2-Dichloroethene	010061-02-6	U	ug/L	3	10	
trans-1,3-Dichloropropene	000079-01-6	Ü	ug/L	5	20	
Trichloroethene	000075-69-4	Ū	ug/L	4	10	
Trichlorofluoromethane	000108-05-4	Ü	ug/L	4	10	45
Vinyl Acetate	00075-01-4	Ü	ug/L	4	10	0.3
Vinyl Chloride	000073-07-4	0	~9, ~	•		

Surrogate Recoveries

Carrogato i toco i crisc		THE RESIDENCE OF THE PERSON NAMED IN COLUMN 2 IS NOT THE OWNER.	the file temporary of the last of the contract Ethics (187) of	1	
Surrogate	CAS	% Recovery 🖖	Units -	LCL	UCU
Bromofluorobenzene	000460-00-4	104	%	86	115
Dibromofluoromethane	001868-53-7	93.3	%	86	118
Toluene-d8	002037-26-5	96.9	%	88	110

of spoles

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Analytical Results

URS Operating Services, Inc.

Project ID:

600143/OS02P8122

Sample ID:

NTS-MW-21

ACZ ID: L37293-07

06/17/02 14:00 Date Sampled:

06/18/02 Date Received:

Surface Water Sample Matrix:

Volatile Organics by GC/MS

Analysis Method:

M8260B

Extract Method:

Method

Analyst: jj

Extract Date: 06/20/02 15:50

Analysis Date: 06/20/02 15:50

Dilution Factor:

Compound	CAS Resul	t QUAL	Units	MDL	PQL	
Compound		Vicitalism on Application and accommodity	ug/L	4	10	
1,1,1,2-Tetrachioroethane	000630-20-6	บ บ	ug/L ug/L	10	30	
1,1,1-Trichloroethane	000071-55-6	Ü	ug/L	3	10	
1,1,2,2-Tetrachloroethane	000079-34-5	Ü	ug/L	4	10	
1,1,2-Trichloroethane	000079-00-5	Ü	ug/L	4	10	
1,1-Dichloroethane	000075-34-3	Ü	ug/L ug/L	4	10	
1,1-Dichloroethene	000075-35-4	Ü	ug/L	4	10	
1,1-Dichloropropene	000563-58-6	Ü	ug/L ug/L	4	10	
1,2,3-Trichlorobenzene	000087-61-6	υ	ug/L	4	10	
1,2,3-Trichloropropane	000096-18-4	Ü	ug/L	3	10	
1,2,4-Trichlorobenzene	000120-82-1	U	ug/L	4	10	
1,2,4-Trimethylbenzene	000095-63-6	Ü	ug/L	4	10	
1,2-Dibromo-3-chloropropane	000096-12-8	Ü	ug/L	4	10	
1,2-Dibromoethane	000106-93-4	Ü	ug/L	4	10	
1,2-Dichlorobenzene	000095-50-1	Ü	ug/L	4	10	
1,2-Dichloroethane	000107-06-2	Ü	ug/L	4	10	
1,2-Dichloropropane	000078-87-5	Ü	ug/L	4	10	
1,3,5-Trimethylbenzene	000108-67-8	Ü	ug/L	4	10	とこ
1,3-Dichlorobenzene	000541-73-1	Ü	ug/L	4	10	ムゴ
1,3-Dichloropropane	000142-28-9	Ü	ug/L	4	10	U(
1,4-Dichlorobenzene	000106-46-7	Ü	ug/L	4	10	
2,2-Dichloropropane	000594-20-7	Ü	ug/L	10	30	
2-Butanone	000078-93-3	บ	ug/L	50	100	
2-Chloroethyl vinyl ether	000110-75-8	Ü	ug/L	4	10	
2-Chlorotoluene	000095-49-8	Ü	ug/L	10	30	
2-Hexanone	000591-78-6	Ü	ug/L	4	10	
4-Chlorotoluene	000106-43-4	Ü	ug/L	4	10 (八丁
4-Isopropyltoluene	000099-87-9	Ü	ug/L	40	100	-
4-Methyl-2-Pentanone	000108-10-1	· Ü	ug/L	10	30	
Acetone	000067-64-1	Ü	ug/L	20	40	
Acrylonitrile	000107-13-1	Ü	ug/L	4	10	
Benzene	000071-43-2	Ü	ug/L	4	10	
Bromobenzene	000108-86-1	Ü	ug/L	4	10	
Bromochloromethane	000074-97-5	Ü	ug/L	4	10	
Bromodichloromethane	000075-27-4	Ü	ug/L	4	10	
Bromoform	000075-25-2	Ü	ug/L	4	10	
Bromomethane	000074-83-9	Ü	ug/L	4	10	
Carbon Disulfide	000075-15-0	Ü	ug/L	10	30	
Carbon Tetrachloride	000056-23-5	Ü	ug/L ug/L	4	10	
Chlorobenzene	000108-90-7	U	ug/L ug/L	4	10	
Chloroethane	000075-00-3	Ü	ug/L ug/L	4	10	
Chloroform	000067-66-3	U	ug/L ug/L	4	10	
Chloromethane	000074-87-3	U	ug/L ug/L	4	10	
cis-1,2-Dichloroethene	000156-59-2	บ	ug/L ug/L	4	10	
cis-1,3-Dichloropropene	010061-01-5	U	ug/L	4	10	
Dibromochloromethane	000124-48-1	J	ug, L	•		
						/

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Analytical Results

URS Operating Services, Inc.

Project ID:

600143/OS02P8122

Sample ID:

NTS-MW-21

ACZ ID: L37293-07

Date Sampled: 06/17/02 14:00

Date Received: 06/18/02

Sample Matrix: Surface Water

Dibromomethane	000074-95-3	U	ug/L	4	10	
Dichlorodifluoromethane	000075-71-8	U	ug/L	5	20	
Ethylbenzene	000100-41-4	U	ug/L	4	10	
Hexachlorobutadiene	000087-68-3	U	ug/L	4	. 10	
Isopropylbenzene	000098-82-8	U	ug/L	4	10	
m,p-Xylene	001330 20 7	U	ug/L	10	30	ルン
Methyl Tert Butyl Ether	001634-04-4	U	ug/L	4	10	
Methylene Chloride	000075-09-2	U	ug/L	4	10	ムゴ
Naphthalene	000091-20-3	U	ug/L	3 .	10	
n-Butylbenzene	000104-51-8	- U	ug/L	4	10	
n-Propylbenzene	000103-65-1	U	ug/L	4	10	
o-Xylene	000095-47-6	U	ug/L	4	10	CV3
sec-Butylbenzene	000135-98-8	U	ug/L	4	10	
Styrene	000100-42-5	U	ug/L	4	10	こと
tert-Butylbenzene	000098-06-6	U	ug/L	4	10	
Tetrachloroethene	000127-18-4	บ	ug/L	4	10	
Toluene	000108-88-3	U	ug/L	4	10	
trans-1,2-Dichloroethene	000156-60-5	U	ug/L	4	10	
trans-1,3-Dichloropropene	010061-02-6	υ	ug/L	3	10	
Trichloroethene	000079-01-6	U	ug/L	5	20	
Trichlorofluoromethane	000075-69-4	· U	ug/L	4	10	_
Vinyl Acetate	000108-05-4	υ	ug/L	4	10	ムン
Vinyl Chloride	000075-01-4	U	ug/L	4	10	

Surrogate Recoveries

Surrogate	CAS	:: %'Recovery	Units	LCL	UCL
Bromofluorobenzene	000460-00-4	100	%	86	115
Dibromofluoromethane	001868-53-7	97.9	%	86	118
Toluene-d8	002037-26-5	98.5	%	88	110

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2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Analytical Results

URS Operating Services, Inc.

Project ID:

600143/OS02P8122

Sample ID:

NTS-VMP-02

ACZ ID: L37293-08

Date Sampled: 06/17/02 14:40

Date Received: 06/18/02

Sample Matrix: Surface Water

Volatile Organics by GC/MS

Analysis Method:

M8260B

Extract Method:

Method

Analyst: jj

Extract Date:

06/20/02 19:04

Analysis Date:

e: 06/20/02 19:04

Dilution Factor: 5

Compound	CAS	Result	QUAL	Units .	MDL	PQL	
Compound	000630-20-6		U	ug/L	20	50	
1,1,1,2-Tetrachloroethane	000030-20-0		Ū	ug/L	50	100	
1,1,1-Trichloroethane	000071-33-5		Ū	ug/L	20	50	
1,1,2,2-Tetrachloroethane	000079-00-5		U	ug/L	20	50	
1,1,2-Trichloroethane	000075-34-3		Ü	ug/L	20	50	
1,1-Dichloroethane	000075-35-4		Ū	ug/L	20	50	
1,1-Dichloroethene	000563-58-6		· U	ug/L	20	50	
1,1-Dichloropropene	000087-61-6		Ü	ug/L	20	50	
1,2,3-Trichlorobenzene	000096-18-4	•	Ū	ug/L	20	50	
1,2,3-Trichloropropane	000120-82-1		U	ug/L	20	50	
1,2,4-Trichlorobenzene	000095-63-6		Ū	ug/L	20	50	
1,2,4-Trimethylbenzene	000095-03-0		Ū	ug/L	20	50	
1,2-Dibromo-3-chloropropane	000106-93-4	* •	U	ug/L	20	50	
1,2-Dibromoethane	000095-50-1		υ	ug/L	20	50	
1,2-Dichlorobenzene	000107-06-2		Ū	ug/L	20	50	
1,2-Dichloroethane	000078-87-5		Ü	ug/L	20	50	
1,2-Dichloropropane	00078-07-3		Ū	ug/L	20	50	
1,3,5-Trimethylbenzene	000541-73-1		Ü	ug/L	20	50	とと
1,3-Dichlorobenzene	000541-75-1		Ū	ug/L	20	50	7 1
1,3-Dichloropropane	000106-46-7		Ü	ug/L	20	50	· 3
1,4-Dichlorobenzene	000106-46-7		Ü	ug/L	20	50	
2,2-Dichloropropane	000594-20-7		Ū	ug/L	50	100	
2-Butanone	000076-93-3		Ü	ug/L	300	600	
2-Chloroethyl vinyl ether	000110-75-8		Ü	ug/L	20	50	
2-Chlorotoluene	000591-78-6		Ü	ug/L	50	100	
2-Hexanone			Ü	ug/L	20	50	
4-Chlorotoluene	000106-43-4 000099-87-9		Ü	ug/L	20	50	とし
4-Isopropyltoluene			Ŭ	ug/L	200	500	-
4-Methyl-2-Pentanone	.000108-10-1 000067-64-1		Ü	ug/L	50	100	
Acetone	000107-13-1		Ŭ	ug/L	80	200	
Acrylonitrile		70 ·	•	ug/L	20	50	
Benzene	000071-43-2	, ,	U:	ug/L	20	50	
Bromobenzene	000108-86-1		Ü	ug/L	20	50	
Bromochloromethane	000074-97-5		Ü	ug/L	20	50	
Bromodichloromethane	000075-27-4		·Ū	ug/L	20	50	
Bromoform	000075-25-2		Ŭ	ug/L	20	50	
Bromomethane	000074-83-9		Ü	ug/L	20	50	
Carbon Disulfide	000075-15-0		Ü	ug/L	50	100	
Carbon Tetrachloride	000056-23-5		Ü	ug/L	20	50	
Chlorobenzene	000108-90-7		U	ug/L	20	50	
Chloroethane	000075-00-3		U	ug/L	20	50	
Chloroform	000067-66-3		U	ug/L ug/L	20	50	
Chloromethane	000074-87-3		U	ug/L	20	50	
cis-1,2-Dichloroethene	000156-59-2		U		20	50	- 13
cis-1,3-Dichloropropene	010061-01-5		U	ug/L ug/L	20	50	10/31
Dibromochloromethane	000124-48-1		U	ug/L	20		1~

REPOR.01.01.01.02

L37293: Page 23 of 32

ACZ Laboratories, Inc. 2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Analytical Results

URS Operating Services, Inc.

Project ID:

600143/OS02P8122

Sample ID:

NTS-VMP-02

L37293-08 ACZ ID:

Date Sampled: 06/17/02 14:40

Date Received: 06/18/02

Sample Matrix: Surface Water

Dibromomethane	000074-95-3		U	ug/L	20	50
Dichlorodifluoromethane	000075-71-8		U	ug/L	30	80
Ethylbenzene	000100-41-4		U	ug/L	20	50
Hexachlorobutadiene	000087-68-3		บ	ug/L	20	50
Isopropylbenzene	000098-82-8		U	ug/L	20	50
m,p-Xylene	001330 20 7		U	ug/L	50	100 (1)
Methyl Tert Butyl Ether	001634-04-4	360		ug/L	20	50
Methylene Chloride	000075-09-2		U	ug/L	20	50 UJ
Naphthalene	000091-20-3		U	ug/L	20	50
n-Butylbenzene	000104-51-8		U	ug/L	20	50
n-Propylbenzene	000103-65-1		U	ug/L	20	50
o-Xylene	000095-47-6		υ	ug/L	20	50 U
sec-Butylbenzene	000135-98-8		U	ug/L	20	50
•	000100-42-5		U	ug/L	20	50 (人)
Styrene tert-Butylbenzene	000098-06-6		υ	ug/L	20	50
Tetrachloroethene	000127-18-4		U	ug/L	20	50
Toluene	000108-88-3		U	ug/L	20	50
trans-1,2-Dichloroethene	000156-60-5	•	U	ug/L	20	50
	010061-02-6		U	ug/L	20	50
trans-1,3-Dichloropropene Trichloroethene	000079-01-6		U	ug/L	30	80
Trichlorofluoromethane	000075-69-4		U	ug/L	20	50
	000108-05-4		U	ug/L	20	50 ムゴ
Vinyl Acetate	000075-01-4		U	ug/L	20	50
Vinyl Chloride	000010-01-4		_	0		

Surrogate Recoveries

Surrogate recoverios		1. Charles 1. C. C. S. C.	2011	100	
Surrogate	CAS	⊩% Recovery	Units	LCL	W-UCL)
Bromofluorobenzene	000460-00-4	102	%	86	115
Dibromofluoromethane	001868-53-7	100	%	86	118
Toluene-d8	002037-26-5	95.5	%	88	110

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2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Analytical Results

URS Operating Services, Inc.

Project ID:

600143/OS02P8122

Sample ID:

NTS-MW-08

ACZ ID:

L37293-01

Date Sampled:

06/17/02 16:00

Date Received:

06/18/02

Sample Matrix:

Surface Water

Total Volatile Hydrocarbons

Analysis Method:

M8015B GC/FID

Extract Method:

Method

Analyst:

cbrlkm on

Extract Date:

06/25/02 13:51

Analysis Date:

06/25/02 13:51 Dilution Factor:

Compound

Compound TVH C6 to C10

Result 0.22

mg/L

MDL 0.01

0.05

Surrogate Recoveries

Surrogate.

000460-00-4

6 Recovery 102

Units

UCL LCL 80

120

See case narrative.

Bromofluorobenzene



2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Analytical Results

URS Operating Services, Inc.

Project ID:

600143/OS02P8122

Sample ID:

NTS-MW-10

ACZ ID: L37293-02

Date Sampled: 06/17/02 16:25

06/18/02 Date Received:

Surface Water Sample Matrix:

Total Volatile Hydrocarbons

Analysis Method:

M8015B.GC/FID

Extract Method:

Method

Analyst: cbr/km on

Extract Date: 06/25/02 14:33

Analysis Date: 06/25/02 14:33

Dilution Factor: 20

Compound Result Compound mg/L 0.2 3.5 TVH C6 to C10

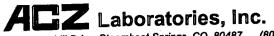
Surrogate Recoveries

LCL % Recovery CAS Surrogate 80 111 000460-00-4 Bromofluorobenzene

See case narrative.

UCL

120



2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Organic Analytical Results

URS Operating Services, Inc.

Project ID:

600143/OS02P8122

Sample ID:

NTS-MW-14

ACZ ID:

L37293-05

Date Sampled:

06/17/02 15:35

Date Received:

06/18/02

Sample Matrix:

Surface Water

Total Volatile Hydrocarbons

Analysis Method:

M8015B GC/FID

Extract Method:

Method

Analyst:

cbr/km on

Extract Date:

06/25/02 15:18

Analysis Date:

06/25/02 15:18

Dilution Factor: 1

0.05 45

Compound CAS	Result	QUAL	Units	MDL	PQL
TVH C6 to C10	0.026	J	mg/L	0.01	0.05

Surrogate Recoveries
CAS % Recovery Units LCL UCL Surrogate
Bromofluorobenzene 000460-00-4 97.8 % 80 120

See case narrative.

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REPOR.01.01.01.02

L37293: Page 13 of 32



2773 Downhill Drive Steamboat Springs, CO 80487

(800) 334-5493

Organic Analytical Results

URS Operating Services, Inc.

Project ID:

600143/OS02P8122

Sample ID:

NTS-MW-20

ACZ ID:

L37293-06

Date Sampled:

06/17/02 15:40

Date Received:

06/18/02

Sample Matrix:

Surface Water

Total Volatile Hydrocarbons

Analysis Method:

M8015B GC/FID

Extract Method:

Method

Analyst:

cbr/km on

Extract Date:

06/25/02 16:01

Analysis Date: 06/25/02 16:01

Dilution Factor:

Compound Compound

CAS

Result

PQL 0.05

0.05 US

TVH C6 to C10

0.026

mg/L

Units

0.01

Surrogate Recoveries Surrogate

000460-00-4

95.2

UCL LCL 120 80

Bromofluorobenzene See case narrative.

(800) 334-5493 2773 Downhill Drive Steamboat Springs, CO 80487

Organic Analytical Results

URS Operating Services, Inc.

Project ID:

600143/OS02P8122

Sample ID:

NTS-MW-21

ACZ ID:

L37293-07

Date Sampled:

06/17/02 14:00

Date Received:

06/18/02

Sample Matrix:

Surface Water

Total Volatile Hydrocarbons

Analysis Method:

M8015B GC/FID

Extract Method:

Method

Analyst:

cbr/km on

Extract Date: Analysis Date: 06/25/02 16:43

06/25/02 16:43

Dilution Factor:

Compound Compound

QUAL Units mg/L

MDL

0.05

TVH C6 to C10

0.023

0.01

0.05 UJ

Surrogate Recoveries

Surrogate Bromofluorobenzene

000460-00-4

Recovery 98.6

Units %

UCL 80 120

See case narrative.

2773 Downhill Drive Steamboat Springs, CO 80487

Organic Analytical Results

URS Operating Services, Inc.

Project ID:

600143/OS02P8122

Sample ID:

NTS-VMP-02

ACZ ID:

L37293-08

Date Sampled:

06/17/02 14:40

Date Received:

06/18/02

Sample Matrix:

Surface Water

Total Volatile Hydrocarbons

Analysis Method:

M8015B GC/FID

Extract Method:

Method

Analyst:

cbr/km on

Extract Date: Analysis Date: 06/25/02 17:26

06/25/02 17:26

Dilution Factor:

Compound Compound

Result

PQL MDL Units

TVH C6 to C10

0.659

mg/L

0.01

0.05

Surrogate Recoveries Surrogate

000460-00-4

Recovery 98.6

Units 80

120

Bromofluorobenzene See case narrative.